



TUTHILL
Coupling Group

Hansen Couplings
Coupleurs Gromelle



QUICK COUPLING REFERENCE GUIDE



Air-Oil Systems, Inc. www.airoil.com

A Letter from the President

To Our Valued Customers:

Tuthill Coupling Group's philosophy is to understand our customer's values and develop products and process to exceed their expectations. Our relentless emphasis on employee development results in an organization that is nimble and can execute by delivering quality products backed by great customer service. We believe, having the best people focused on delivering value to the customer, will keep us in the forefront of the quick connect coupling industry.

As the innovator of quick disconnect couplings, for over 90 years, the Hansen brand has earned the reputation for top quality. Evidenced in this expanded catalog, Hansen Couplings are now available in a multitude of sizes and materials. Even more offerings are showcased on our website www.tuthill.com including many of our European style offerings. Tuthill Coupling Group has one of the broadest product lines available in the industry.

Our quick connect couplings are backed by an experienced team of professionals with complete technical resources at your disposal. Engineers work directly with customers to find the right coupling for their application, often improving their existing systems and making the critical difference for demanding requirements. Our ability to design and produce special products for original equipment manufacturers is a core strength.

While we have been recognized by industry groups, trade journals, and customers for having excellent manufacturing capabilities, coupled with a zeal for continuous improvement, we are never content with anything less than perfection. It is true that the Hansen Coupling brand has a remarkable history, yet with our team of dedicated employees, the future is even more exciting.

Sincerely,



Brett Jaffe
President



By focusing exclusively on couplings, Tuthill Coupling Group has achieved a competitive edge in providing the world's best and most complete line of quick disconnect couplings. The quick connect/disconnect coupling was first developed and manufactured by Hansen Manufacturing Company, founded in 1915 by Fred Hansen. Since then, the Hansen coupling has become the industry standard for all quick connect/disconnect couplings.

Tuthill Coupling Group designs, manufactures and distributes a broad range of couplings in brass, steel, stainless steel and plastic. These products are used to quickly connect and disconnect a wide variety of fluids and gases, especially air and hydraulic oil.

The bodies, sleeves and plugs are manufactured by Tuthill Coupling Group, then hardened and plated as required, and then assembled with other components such as stainless steel balls, seals and valves. Hansen Couplings are available in over 3,000 configurations, which are marketed to end users and original equipment manufacturers all over the world.

Since Hansen was purchased by Tuthill Corporation in 1979, it has maintained a steady pattern of growth. Tuthill Coupling Group will continue to be a major factor in this market by offering a comprehensive range of products, which are thoroughly researched, carefully designed, and precision manufactured. Our products are widely distributed through an increasingly strong network of worldwide distributors that are well versed in the engineered fluid power product needs of our customers.



PRODUCT ENGINEERING

Many designs created as full specials have now become the world standard. Tuthill Coupling Group has provided full service solutions, dedicated exclusively to quick disconnect applications. Tuthill Coupling Group's engineers develop new products and modify designs of existing products using the latest Computer Aided Design programs.

PRODUCT DESIGN & PROTOTYPE

Tuthill Coupling Group's state of the art prototype development lab offers a unique environment for cycle testing, pressure testing and full model shop manufacturing. Quality controlled standards insure complete success on new and standard product designs. Tuthill Coupling Group products maintain a constantly high level of quality and dependability through extensive product testing and evaluation.

QUALITY CONTROL

Tuthill Coupling Group's Quality Management System is registered to rigid ISO 9001:2000 standards. The highest quality raw materials and components are machined and meticulously assembled. Care is taken to record and maintain specific tolerances in the day-to-day production of our products through constant monitoring and calibrating of our production equipment.

CUSTOMER SERVICE

Your highly trained inside sales representative is equipped to aid customers in product selection and to ensure your order is processed quickly, efficiently and accurately. Our customer fulfillment staff works closely with their corresponding outside sales individual to ensure consistent personalized assistance from the time an order is placed to the final assembly point of the product. Our distributors are strategically located throughout the world to provide prompt delivery of Hansen Couplings. Tuthill Coupling Group's goal is to provide our customers with the best service and technical support available.

ISO 9001:2000



Certificate No. 006888



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ONE-WAY COUPLINGS





Contents and Selector Chart

ONE-WAY

Coupling Series	Page	Coupling Style			Interchange						Body Size					Body Material				Locking Mechanism				Options		
		MANUAL CONNECT	PUSH-TO-CONNECT	SAFETY COUPLING	INDUSTRIAL INTERCHANGE	ARO 210	TRU-FLATE	CEJN 320/RECTUS 25	HANSEN RL STYLE	HANSEN UNIQUE DESIGN	1/8 INCH	1/4 INCH	3/8 INCH	1/2 INCH	3/4 INCH	ALUMINUM	BRASS	STEEL (Zinc/Chromate Finish)	STAINLESS STEEL	PLASTIC (Acetal)	BALL LOCK	PIN LOCK	RING LOCK	PLASTIC FINGERS	SLEEVE LOCK	SEAL MATERIALS (Various)
1000	11	●			●						●					●	●			●				●	●	●
400	12	●			●		●					●				●	●			●				●	●	●
500	13	●			●								●			●	●			●				●	●	
3000	15		●		●						●					●	●				●			●	●	●
4000	16		●		●							●				●	●				●			●	●	●
5000	17		●		●							●				●	●				●			●	●	
6000	18		●		●								●			●	●				●			●	●	
P-30	19		●		●						●							●				●				
P-40	19		●		●							●						●				●				
Auto-Flo 23	21		●		●	●	●				●					●	●			●						
Auto-Flo 24	21		●		●		●				●					●	●			●						
Safeline	23		●	●	●						●				●	●				●						
180/280	24	●						●	●							●	●			●					●	
100	25	●						●	●							●	●			●					●	●
600/700	27	●						●	●							●	●			●				●	●	●
2-RL	31		●					●	●							●	●				●		▼	●	●	●
3-RL	32		●					●	●		●					●	●				●		▼	●	●	●

▼ Sleeve lock is automatic with RL couplings.

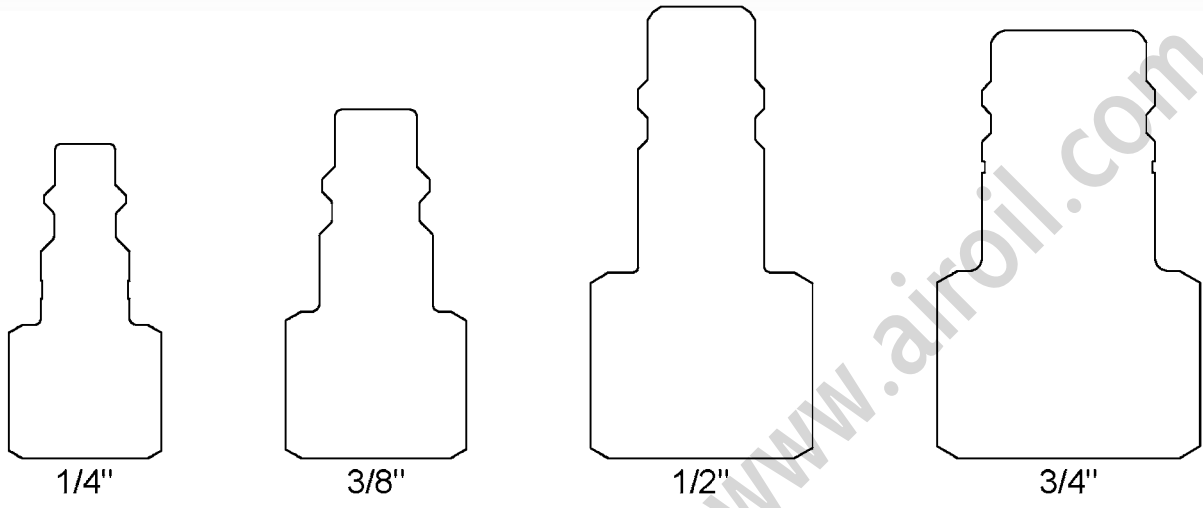
ONE-WAY PLUG

Interchange Chart



ONE-WAY

The plug profiles shown below are actual size. This chart can be used to help select Hansen one-way couplings. Industrial Interchange plugs of the appropriate size connect with the following Series sockets: 1000, 400, 500, 3000, 4000, 5000, 6000, Auto-Flo 23, P-30, P-40 and SVS. ARO 210 and Tru-Flate 1/4" plugs connect with Auto-Flo 23 sockets. Tru-Flate 3/8" plugs connect with Series 400 sockets. Auto-Flo 24 plugs interchange with CEJN 320 and Rectus 24. The bottom row of this chart shows unique Hansen plug designs.



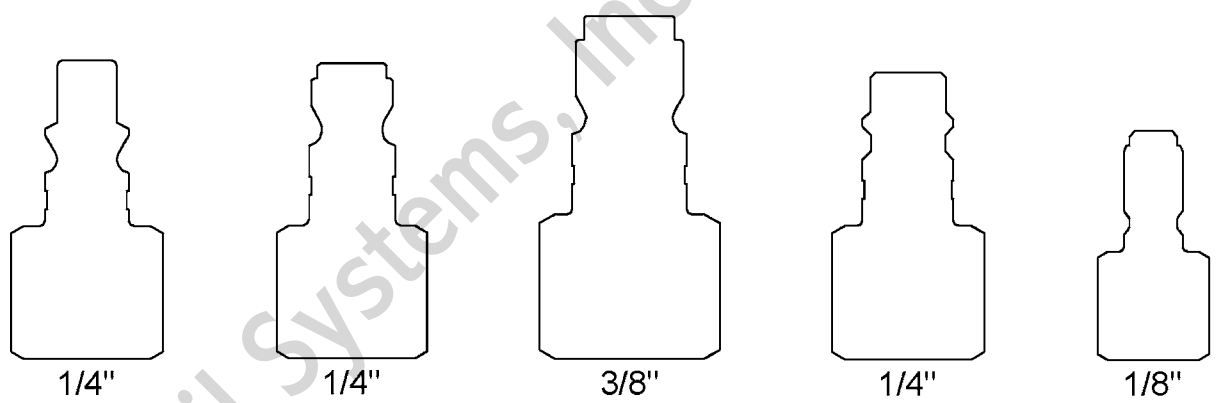
1/4"

3/8"

1/2"

3/4"

Industrial Interchange



1/4"

1/4"

3/8"

1/4"

1/8"

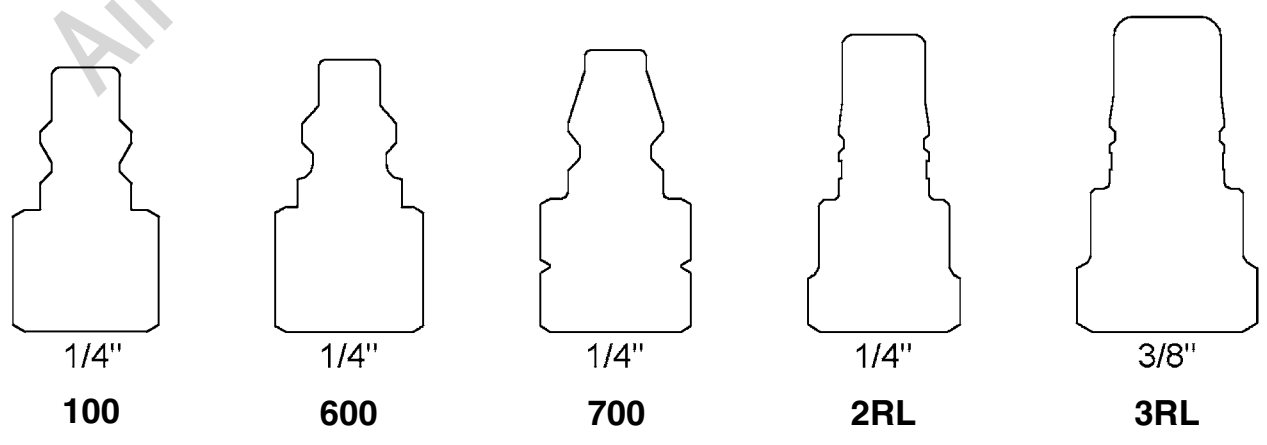
ARO 210

Tru-Flate

Tru-Flate

Auto-Flo 24

180/280



1/4"

1/4"

1/4"

1/4"

3/8"

100

600

700

2RL

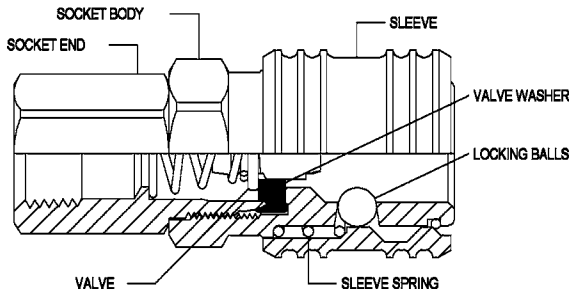
3RL



Series 1000/400/500

Industrial Interchange

ONE-WAY



Industrial Interchange Ball Lock Quick-Connect Couplings designed for compressed air, gases, and liquids. Body sizes are 1/4", 3/8" and 1/2".

Features

- Ball lock
- Manual operation
- Rugged, reliable
- 1/4" and 1/2" sockets accept MIL-C-4109 plugs
- Optional sleeve lock prevents accidental disconnection
- Optional seal and valve materials available
- Optional stainless steel socket (Series 1000 only)
- Series 400 sockets accept Tru-Flate Interchange plugs and Industrial Interchange plugs

Standard Materials

- Socket
 - Brass Body
 - Nickel Plated Steel Sleeve
 - Zinc Plated Steel Valve
 - Buna-N (Nitrile) Seal
 - Stainless Steel Springs
 - Stainless Steel Locking Balls
- Plug
 - Zinc Plated Case-Hardened Steel (All Sizes)
 - Brass (All Sizes)
 - Stainless Steel (Series 1000)

Accessories

- Dust caps and dust plugs (See page 68)

Rated Pressure

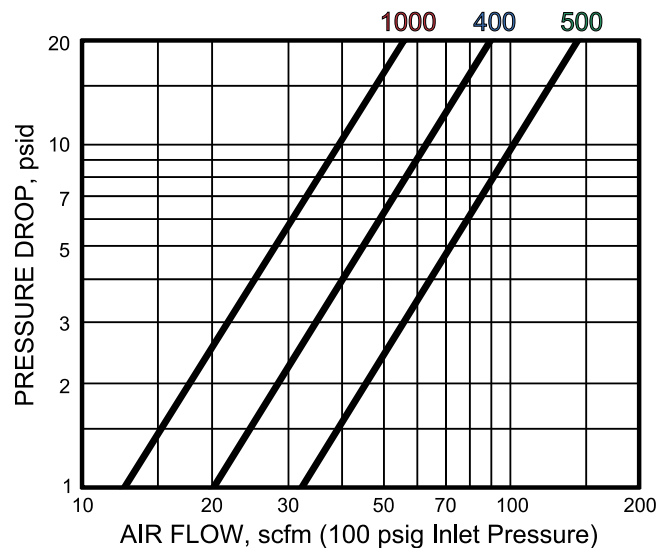
Series	Size	PSI	BAR
1000	1/4"	2,000	138
400	3/8"	1,000	69
500	1/2"	500	35

NOTE: Series 400 operating pressure is 150 psi when connected to Tru-Flate Interchange plug.

Flow Capacity

Series	† Ac
1000	28
400	45
500	72

† Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure



Series 1000 1/4" Nominal



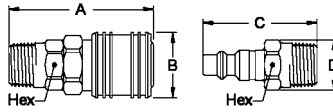
ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions		
		A	B	HEX
Brass				
900	1/8-27 NPTF	2.07	1.00	0.69
1100	1/4-18 NPTF	2.22	1.00	0.69
1300	3/8-18 NPTF	2.22	1.00	0.69
1000-43	7/16-20*	2.16	1.00	0.69
1000-63	5/8-18*	2.29	1.00	0.69
Stainless				
LL-1100	1/4-18 NPTF	2.22	1.00	0.69

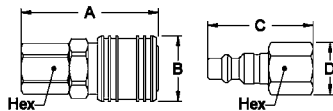
Male End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
Steel				
10	1/4-18 NPTF	1.75	0.65	0.56
10C§	1/4-18 NPTF	1.75	0.65	0.56
10G†	1/4-18 NPTF	1.75	0.65	0.56
12	1/8-27 NPTF	1.59	0.58	0.50
12G†	1/8-27 NPTF	2.38	0.77	0.69
14	3/8-18 NPTF	1.75	0.79	0.69
14G†	3/8-18 NPTF	2.53	0.77	0.69
10-43	7/16-20*	1.69	0.58	0.50
Brass				
B-10	1/4-18NPTF	1.75	0.64	0.56
Stainless				
LL-10	1/4-18 NPTF	1.75	0.65	0.56

Part No.	Thread Size	Dimensions		
		A	B	HEX
Brass				
800	1/8-27 NPTF	1.91	1.00	0.69
1000	1/4-18 NPTF	1.91	1.00	0.69
1200	3/8-18 NPTF	2.19	1.00	0.75
Stainless				
LL-1000	1/4-18 NPTF	1.91	1.00	0.69

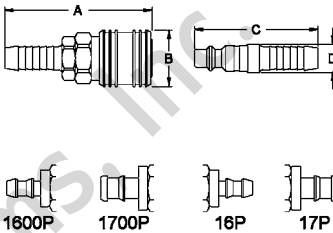
Female End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
Steel				
11	1/4-18 NPTF	1.63	0.79	0.69
11G†	1/4-18 NPTF	2.44	0.77	0.69
13	1/8-27 NPTF	1.47	0.65	0.56
15	3/8-18 NPTF	1.69	0.94	0.81
Brass				
11B	1/4-18 NPTF	1.63	0.78	0.69
Stainless				
LL-11	1/4-18 NPTF	1.63	0.79	0.69

Part No.	Hose I.D.	Dimensions	
		A	B
1600	1/4"	2.66	1.00
1600P‡	1/4"	2.44	1.00
1700	3/8"	2.65	1.00
1700P‡	3/8"	2.54	1.00
1800	5/16"	2.66	1.00

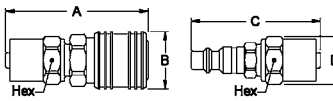
Hose Stem End Connections



Part No.	Hose I.D.	Dimensions	
		C	D
Steel			
16	1/4"	2.22	0.50
16G†	1/4"	2.97	0.77
16P‡	1/4"	2.00	0.69
16PG† ‡	1/4"	2.75	0.77
17	3/8"	2.31	0.50
17G†	3/8"	2.96	0.77
17P‡	3/8"	2.06	0.87
17PG† ‡	3/8"	2.85	0.87
18	5/16"	2.22	0.50
Brass			
B-17	3/8"	2.31	0.50

Part No.	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX
1-SA0	3/16"	7/16"	2.69	1.00	0.56
1-SA3	3/16"	1/2"	2.69	1.00	0.63
1-SB1	1/4"	15/32"	2.75	1.00	0.63
1-SB3	1/4"	1/2"	2.75	1.00	0.63
1-SB5	1/4"	9/16"	2.75	1.00	0.69
1-SB7	1/4"	5/8"	2.75	1.00	0.75
1-SC5	5/16"	9/16"	2.82	1.00	0.69
1-SC7	5/16"	5/8"	2.82	1.00	0.75
1-SC9	5/16"	11/16"	2.82	1.00	0.81
1-SD5	3/8"	9/16"	2.88	1.00	0.69
1-SD7	3/8"	5/8"	2.88	1.00	0.75
1-SD9	3/8"	11/16"	2.88	1.00	0.81
1-SD11	3/8"	3/4"	2.88	1.00	0.88

Hose Clamp End Connections



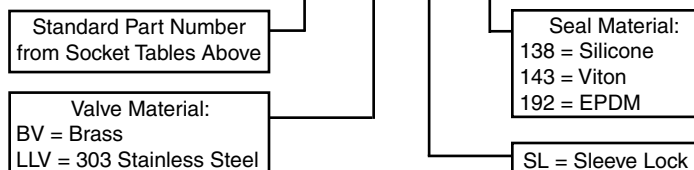
Part No.	Hose		Dimensions		
	I.D.	O.D.	C	D	HEX
Steel					
3-PA0	3/16"	7/16"	2.25	0.63	0.56
3-PA3	3/16"	1/2"	2.25	0.70	0.63
3-PB1	1/4"	15/32"	2.31	0.70	0.63
3-PB3	1/4"	1/2"	2.31	0.70	0.63
3-PB5	1/4"	9/16"	2.31	0.77	0.69
3-PB7	1/4"	5/8"	2.31	0.84	0.75
3-PB9	1/4"	11/16"	2.31	0.91	0.81
3-PB11	1/4"	3/4"	2.31	0.98	0.88
3-PC5	5/16"	9/16"	2.38	0.77	0.69
3-PC7	5/16"	5/8"	2.38	0.84	0.75
3-PC9	5/16"	11/16"	2.38	0.91	0.81
3-PD5	3/8"	9/16"	2.44	0.77	0.69
3-PD7	3/8"	5/8"	2.44	0.84	0.75
3-PD9	3/8"	11/16"	2.44	0.91	0.81
3-PD11	3/8"	3/4"	2.44	1.98	0.88
3-PD13	3/8"	13/16"	2.44	1.05	0.94
3-PD15	3/8"	7/8"	2.44	1.12	1.00

*45° Male Flare §With Ball Check †With Bleeder Ball Check – Reduces hose whip when disconnecting. ‡For use with push-on style hose.

How to build a socket part number with options:

Example: 1000 - BV - SL - 143

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.





Series 400 3/8" Nominal

ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions			Male End Connections		Part No.	Thread Size	Dimensions		
		A	B	HEX	C	D			HEX		
410-A	1/8-27 NPTF	2.20	1.13	0.88			38	1/8-27 NPTF	1.72	0.72	0.63
410	1/4-18 NPTF	2.35	1.13	0.88			40	1/4-18 NPTF	1.88	0.72	0.63
430	3/8-18 NPTF	2.35	1.13	0.88			40G†	1/4-18 NPTF	2.65	0.77	0.69
450	1/2-14 NPTF	2.54	1.13	0.88			42	3/8-18 NPTF	1.88	0.79	0.69

Brass		Dimensions		
Part No.	Thread Size	C	D	HEX
B-40	1/4-18 NPTF	1.88	0.70	0.63
B-42	3/8-18 NPTF	1.88	0.77	0.69

Steel		Dimensions		
Part No.	Thread Size	C	D	HEX
31AP-25M	1/4-18 NPTF	1.85	0.72	0.63
31AP-37M	3/8-18 NPTF	1.85	0.79	0.69

Part No.	Thread Size	Dimensions			Female End Connections		Part No.	Thread Size	Dimensions		
		A	B	HEX	C	D			HEX		
400-A	1/8-27 NPTF	2.10	1.13	0.88			41	1/4-18 NPTF	1.63	0.79	0.69
400	1/4-18 NPTF	2.10	1.13	0.88			41G†	1/4-18 NPTF	2.56	0.77	0.69
420	3/8-18 NPTF	2.35	1.13	0.88			43	3/8-18 NPTF	1.81	0.94	0.81
440	1/2-14 NPTF	2.62	1.13	1.00			43G†	3/8-18 NPTF	2.62	0.84	0.75

Brass		Dimensions		
Part No.	Thread Size	C	D	HEX
B-43	3/8-18 NPTF	1.81	0.91	0.81

Steel		Dimensions		
Part No.	Thread Size	C	D	HEX
31AP-25F	1/4-18 NPTF	1.60	0.79	0.69
31AP-37F	3/8-18 NPTF	1.78	0.94	0.81

Part No.	Hose I.D.	Dimensions		Hose Stem End Connections		Part No.	Hose I.D.	Dimensions	
		A	B	C	D				
4004	1/4"	2.82	1.13			404	1/4"	2.34	0.63
4050	5/16"	2.82	1.13			406	3/8"	2.34	0.63
4006	3/8"	2.82	1.13			408	1/2"	2.34	0.81
4008	1/2"	2.82	1.13			Brass		B-406	3/8"

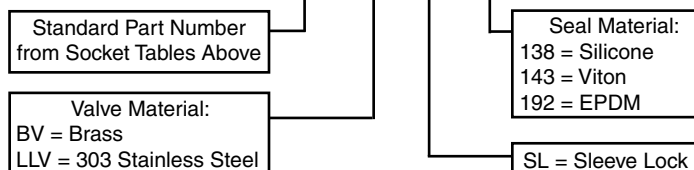
Part No.	Hose		Dimensions			Hose Clamp End Connections		Part No.	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX	C	D		Steel	I.D.	O.D.	C	D
40-SB3	1/4"	1/2"	2.92	1.13	0.63			4-PB1	1/4"	15/32"	2.44	0.70	0.63
40-SB7	1/4"	5/8"	2.92	1.13	0.75			4-PB3	1/4"	1/2"	2.44	0.70	0.63
40-SD7	3/8"	5/8"	3.04	1.13	0.75			4-PB5	1/4"	9/16"	2.44	0.77	0.69
40-SD9	3/8"	11/16"	3.04	1.13	0.81			4-PB7	1/4"	5/8"	2.44	0.84	0.75
40-SD11	3/8"	3/4"	3.04	1.13	0.88			4-PB9	1/4"	11/16"	2.44	0.91	0.81
40-SD13	3/8"	13/16"	3.04	1.13	0.94			4-PB11	1/4"	3/4"	2.44	0.98	0.88
40-SP13	1/2"	13/16"	3.67	1.13	0.94			4-PD5	3/8"	9/16"	2.56	0.77	0.69
40-SP15	1/2"	7/8"	3.67	1.13	1.00			4-PD7	3/8"	5/8"	2.56	0.84	0.75
40-SP17	1/2"	15/16"	3.67	1.13	1.06			4-PD9	3/8"	11/16"	2.56	0.91	0.81
40-SP19	1/2"	1"	3.67	1.13	1.13			4-PD11	3/8"	3/4"	2.56	0.98	0.88
								4-PD13	3/8"	13/16"	2.56	1.05	0.94
								4-PD15	3/8"	7/8"	2.56	1.12	1.00
								4-PP13	1/2"	13/16"	3.25	1.05	0.94
								4-PP15	1/2"	7/8"	3.25	1.12	1.00
						4-PP17	1/2"	15/16"	3.25	1.19	1.06		
						4-PP19	1/2"	1"	3.25	1.26	1.13		

†With Bleeder Ball Check – Reduces hose whip when disconnecting.

How to build a socket part number with options:

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: 400 - BV - SL - 143



All dimensions in inches.

Series 500 1/2" Nominal



ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions			Male End Connections		Part No.	Thread Size	Dimensions		
		A	B	HEX	C	D			HEX		
501	1/4-18 NPTF	2.77	1.19	1.00		50	1/4-18 NPTF	2.25	0.79	0.69	
510	3/8-18 NPTF	2.78	1.19	1.00		50G†	1/4-18 NPTF	2.90	0.98	0.88	
530	1/2-14 NPTF	2.97	1.19	1.00		52	3/8-18 NPTF	2.25	0.87	0.75	
550	3/4-14 NPTF	2.97	1.19	1.06		52G†	3/8-18 NPTF	2.90	0.98	0.88	
						54	1/2-14 NPTF	2.44	1.01	0.88	
						54G†	1/2-14 NPTF	3.09	0.98	0.88	
						56	3/4-14 NPTF	2.50	1.23	1.06	
						56G†	3/4-14 NPTF	3.14	1.19	1.06	
						Brass					
						B-52	3/8-18 NPTF	2.25	0.70	0.63	
						B-54	1/2-14 NPTF	2.44	0.77	0.88	

Part No.	Thread Size	Dimensions			Female End Connections		Part No.	Thread Size	Dimensions		
		A	B	HEX	C	D			HEX		
500-A	1/4-18 NPTF	2.72	1.19	1.00		53-A	1/4-18 NPTF	1.92	0.79	0.69	
500	3/8-18 NPTF	2.78	1.19	1.00		53	3/8-18 NPTF	2.06	0.94	0.81	
520	1/2-14 NPTF	3.06	1.19	1.00		53G†	3/8-18 NPTF	2.90	0.98	0.88	
540	3/4-14 NPTF	3.09	1.19	1.19		55	1/2-14 NPTF	2.34	1.15	1.00	
						55G†	1/2-14 NPTF	3.17	0.98	0.88	
						57	3/4-14 NPTF	2.44	1.37	1.19	

Part No.	Hose I.D.	Dimensions		Hose Stem End Connections		Part No.	Hose I.D.	Dimensions	
		A	B	C	D				
570	3/8"	3.32	1.19		585	5/16"	2.66	0.69	
580	1/2"	3.24	1.19		585G†	5/16"	3.37	0.98	
590	3/4"	4.09	1.19		59	3/8"	2.66	0.69	
					59G†	3/8"	3.37	0.98	
					60	1/2"	2.66	0.75	
					60G†	1/2"	3.37	0.98	
					61	3/4"	3.50	1.00	
					61G†	3/4"	4.22	0.98	
					Brass				
					B-60	1/2"	2.75	0.88	

Part No.	Hose		Dimensions			Hose Clamp End Connections		Part No.	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX	C	D		I.D.	O.D.	C	D	HEX
50-SD7	3/8"	5/8"	3.49	1.19	0.75		5-PB1	1/4"	15/32"	2.81	0.70	0.63	
50-SD13	3/8"	13/16"	3.49	1.19	0.94		5-PB3	1/4"	1/2"	2.81	0.70	0.63	
50-SP13	1/2"	13/16"	4.09	1.19	0.94		5-PB5	1/4"	9/16"	2.81	0.77	0.69	
50-SP15	1/2"	7/8"	4.09	1.19	1.00		5-PB7	1/4"	5/8"	2.81	0.84	0.75	
50-SP17	1/2"	15/16"	4.09	1.19	1.06		5-PD5	3/8"	9/16"	2.94	0.77	0.69	
50-SP19	1/2"	1"	4.09	1.19	1.13		5-PD7	3/8"	5/8"	2.94	0.84	0.75	
50-SR23	3/4"	1 1/8"	4.22	1.19	1.25		5-PD9	3/8"	11/16"	2.94	0.91	0.81	
50-SR25	3/4"	1 3/16"	4.22	1.19	1.31		5-PD11	3/8"	3/4"	2.94	0.98	0.88	
50-SR27	3/4"	1 1/4"	4.22	1.19	1.38		5-PD13	3/8"	13/16"	2.94	1.05	0.94	
							5-PD15	3/8"	7/8"	2.94	1.12	1.00	
							5-PP13	1/2"	13/16"	3.62	1.05	0.94	
							5-PP15	1/2"	7/8"	3.62	1.12	1.00	
							5-PP17	1/2"	15/16"	3.62	1.19	1.06	
							5-PP19	1/2"	1"	3.62	1.26	1.13	
							5-PR23	3/4"	1 1/8"	3.75	1.40	1.25	
							5-PR25	3/4"	1 3/16"	3.75	1.47	1.31	
						5-PR27	3/4"	1 1/4"	3.75	1.54	1.38		

†With Bleeder Ball Check – Reduces hose whip when disconnecting.

How to build a socket part number with options:

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: 500 - SL - 143

Standard Part Number from Socket Tables Above

Seal Material:
143 = Viton
192 = EPDM

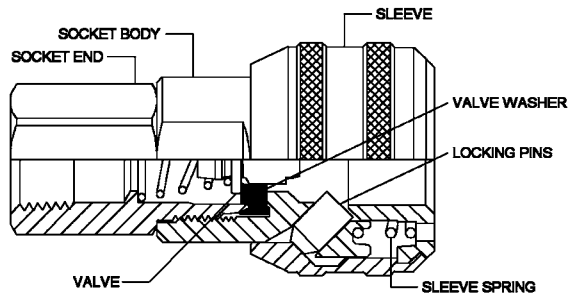
SL = Sleeve Lock



3000/4000/5000/6000

Industrial Interchange

ONE-WAY



Industrial Interchange Pin Lock

Couplings designed for compressed air, gases, and liquids.

Body sizes are 1/4", 3/8", 1/2" and 3/4".

Features

- The original automatic one-way shutoff coupling designed by Hansen—The Industry Standard
- Rugged, reliable
- Easy, automatic, push-to-connect design provides instantaneous connection and disconnection of lines, plus automatic shut-off of socket end of line
- 1/4" and 1/2" sockets accept MIL-C-4109 plug
- Optional sleeve lock prevents accidental disconnection
- Optional seal and valve materials available

Standard Materials

- Socket
 - Brass Body
 - Zinc Plated Steel Valve
 - Buna-N (Nitrile) Seal
 - Stainless Steel Springs
 - Stainless Steel Locking Pins
- Plug
 - Zinc Plated Case-Hardened Steel (All Sizes)
 - Brass (All Sizes)
 - Stainless Steel (Series 3000)

Accessories

- Dust caps and dust plugs (See page 68)

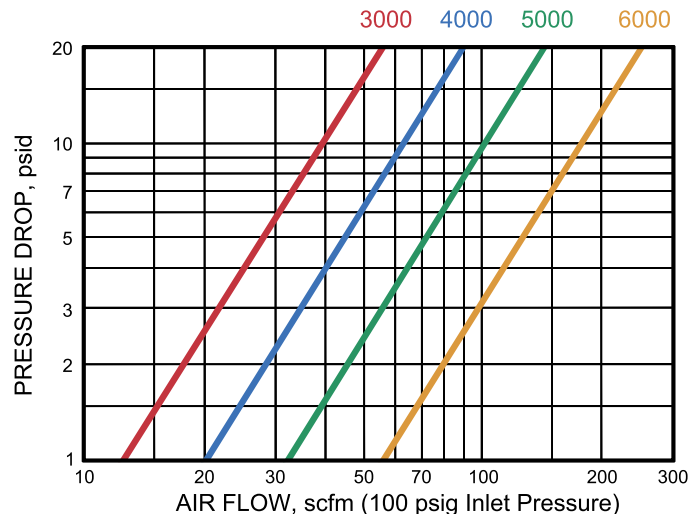
Rated Pressure

Series	Size	PSI	BAR
3000	1/4"	2,000	138
4000	3/8"	1,000	69
5000	1/2"	500	35
6000	3/4"	220	15

Flow Capacity

Series	† Ac
3000	28
4000	45
5000	72
6000	125

† Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure



Series 3000 1/4" Nominal



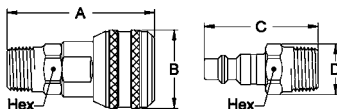
ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions		
		A	B	HEX
2900	1/8-27 NPTF	2.11	1.19	0.69
3100	1/4-18 NPTF	2.26	1.19	0.69
3300	3/8-18 NPTF	2.26	1.19	0.69
3000-43	7/16-20*	2.20	1.19	0.69
3000-63	5/8-18*	2.33	1.19	0.69

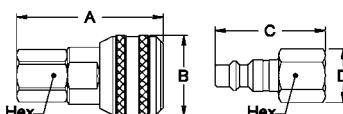
Male End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
10	1/4-18 NPTF	1.75	0.65	0.56
10C§	1/4-18 NPTF	1.75	0.65	0.56
10G†	1/4-18 NPTF	1.75	0.65	0.56
12	1/8-27 NPTF	1.59	0.58	0.50
12G†	1/8-27 NPTF	2.38	0.77	0.69
14	3/8-18 NPTF	1.75	0.79	0.69
14G†	3/8-18 NPTF	2.53	0.77	0.69
Brass				
B-10	1/4-18 NPTF	1.75	0.64	0.56
Stainless				
LL-10	1/4-18 NPTF	1.75	0.65	0.56

Part No.	Thread Size	Dimensions		
		A	B	HEX
2800	1/8-27 NPTF	1.95	1.19	0.69
3000	1/4-18 NPTF	2.17	1.19	0.69
3200	3/8-18 NPTF	2.23	1.19	0.75

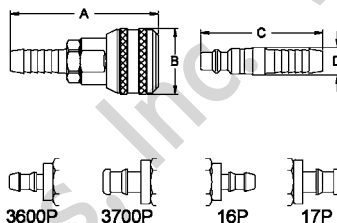
Female End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
11	1/4-18 NPTF	1.63	0.79	0.69
11G†	1/4-18 NPTF	2.44	0.77	0.69
13	1/8-27 NPTF	1.47	0.65	0.56
15	3/8-18 NPTF	1.69	0.94	0.81
Brass				
11B	1/4-18 NPTF	1.63	0.78	0.69
Stainless				
LL-11	1/4-18 NPTF	1.63	0.79	0.69

Part No.	Hose I.D.	Dimensions	
		A	B
3600	1/4"	2.70	1.19
3600P‡	1/4"	2.48	1.19
3700	3/8"	2.69	1.19
3700P‡	3/8"	2.58	1.19
3800	5/16"	2.70	1.19

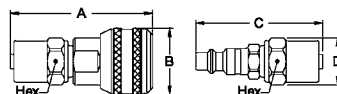
Hose Stem End Connections



Part No.	Hose I.D.	Dimensions	
		C	D
16	1/4"	2.22	0.50
16G†	1/4"	2.97	0.77
16P‡	1/4"	2.00	0.69
16PG†	1/4"	2.75	0.77
17	3/8"	2.31	0.50
17G†	3/8"	2.96	0.77
17P‡	3/8"	2.06	0.87
17PG† ‡	3/8"	2.85	0.87
18	5/16"	2.22	0.50
Brass			
B-17	3/8"	2.31	0.50

Part No.	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX
3-SA0	3/16"	7/16"	2.73	1.19	0.56
3-SA3	3/16"	1/2"	2.73	1.19	0.63
3-SB1	1/4"	15/32"	2.79	1.19	0.63
3-SB3	1/4"	1/2"	2.79	1.19	0.63
3-SB5	1/4"	9/16"	2.79	1.19	0.69
3-SB7	1/4"	5/8"	2.79	1.19	0.75
3-SB9	1/4"	11/16"	2.79	1.19	0.81
3-SB11	1/4"	3/4"	2.79	1.19	0.88
3-SC5	5/16"	9/16"	2.86	1.19	0.69
3-SC7	5/16"	5/8"	2.86	1.19	0.75
3-SC9	5/16"	11/16"	2.86	1.19	0.81
3-SD5	3/8"	9/16"	2.92	1.19	0.69
3-SD7	3/8"	5/8"	2.92	1.19	0.75
3-SD9	3/8"	11/16"	2.92	1.19	0.81
3-SD11	3/8"	3/4"	2.92	1.19	0.88
3-SD13	3/8"	13/16"	2.92	1.19	0.94

Hose Clamp End Connections



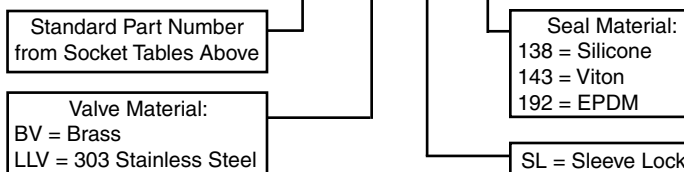
Part No.	Hose		Dimensions		
	I.D.	O.D.	C	D	HEX
3-PA0	3/16"	7/16"	2.25	0.63	0.56
3-PA3	3/16"	1/2"	2.25	0.70	0.63
3-PB1	1/4"	15/32"	2.31	0.70	0.63
3-PB3	1/4"	1/2"	2.31	0.70	0.63
3-PB5	1/4"	9/16"	2.31	0.77	0.69
3-PB7	1/4"	5/8"	2.31	0.84	0.75
3-PB9	1/4"	11/16"	2.31	0.91	0.81
3-PB11	1/4"	3/4"	2.31	0.98	0.88
3-PC5	5/16"	9/16"	2.38	0.77	0.69
3-PC7	5/16"	5/8"	2.38	0.84	0.75
3-PC9	5/16"	11/16"	2.38	0.91	0.81
3-PD5	3/8"	9/16"	2.44	0.77	0.69
3-PD7	3/8"	5/8"	2.44	0.84	0.75
3-PD9	3/8"	11/16"	2.44	0.91	0.81
3-PD11	3/8"	3/4"	2.44	0.98	0.88
3-PD13	3/8"	13/16"	2.44	1.05	0.94
3-PD15	3/8"	7/8"	2.44	1.12	1.00

*45° Male Flare §With Ball Check †With Bleeder Ball Check – Reduces hose whip when disconnecting. ‡For use with push-on style hose.

How to build a socket part number with options:

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: 3000 - BV - SL - 143





Series 4000 3/8" Nominal

ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions			Male End Connections		Part No.	Thread Size	Dimensions		
		A	B	HEX					Steel	C	D
4100-A	1/8-27 NPTF	2.20	1.38	0.88		38	1/8-27 NPTF	1.72	0.72	0.63	
4100	1/4-18 NPTF	2.35	1.38	0.88		40	1/4-18 NPTF	1.88	0.72	0.63	
4300	3/8-18 NPTF	2.35	1.38	0.88		40G†	1/4-18 NPTF	2.65	0.77	0.69	
4500	1/2-14 NPTF	2.54	1.38	0.88		42	3/8-18 NPTF	1.88	0.79	0.69	
						42G†	3/8-18 NPTF	2.65	0.77	0.69	
Brass											
						B-40	1/4-18 NPTF	1.88	0.70	0.63	
						B-42	3/8-18 NPTF	1.88	0.77	0.69	

Part No.	Thread Size	Dimensions			Female End Connections		Part No.	Thread Size	Dimensions		
		A	B	HEX					Steel	C	D
4000-A	1/8-27 NPTF	2.10	1.38	0.88		41	1/4-18 NPTF	1.63	0.79	0.69	
4000	1/4-18 NPTF	2.10	1.38	0.88		41G†	1/4-18 NPTF	2.56	0.77	0.69	
4200	3/8-18 NPTF	2.35	1.38	0.88		43	3/8-18 NPTF	1.81	0.94	0.81	
4400	1/2-14 NPTF	2.62	1.38	1.00		43G†	3/8-18 NPTF	2.62	0.84	0.75	
						45	1/2-14 NPTF	2.06	1.15	1.00	
Brass											
						B-43	3/8-18 NPTF	1.81	0.91	0.81	

Part No.	Hose I.D.	Dimensions		Hose Stem End Connections		Part No.	Hose I.D.	Dimensions	
		A	B					Steel	C
40400	1/4"	2.82	1.38		404	1/4"	2.34	0.63	
40500	5/16"	2.82	1.38		406	3/8"	2.34	0.63	
40600	3/8"	2.82	1.38		408	1/2"	2.34	0.81	
40800	1/2"	2.92	1.38						
Brass									
					B-406	3/8"	2.34	0.63	

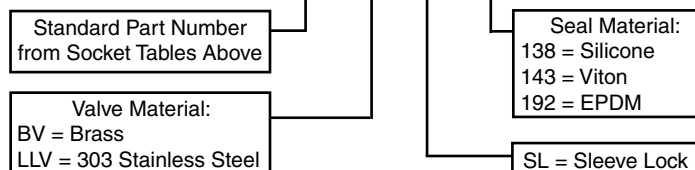
Part No.	Hose		Dimensions			Hose Clamp End Connections		Part No.	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX				Steel	I.D.	O.D.	C	D
4-SB3	1/4"	1/2"	2.92	1.38	0.63		4-PB1	1/4"	15/32"	2.44	0.70	0.63	
4-SB5	1/4"	9/16"	2.92	1.38	0.69		4-PB3	1/4"	1/2"	2.44	0.70	0.63	
4-SB7	1/4"	5/8"	2.92	1.38	0.75		4-PB5	1/4"	9/16"	2.44	0.77	0.69	
4-SB9	1/4"	11/16"	2.92	1.38	0.81		4-PB7	1/4"	5/8"	2.44	0.84	0.75	
4-SB11	1/4"	3/4"	2.92	1.38	0.88		4-PB9	1/4"	11/16"	2.44	0.91	0.81	
4-SC7	5/16"	5/8"	2.98	1.38	0.75		4-PB11	1/4"	3/4"	2.44	0.98	0.88	
4-SD5	3/8"	9/16"	3.04	1.38	0.69		4-PD5	3/8"	9/16"	2.56	0.77	0.69	
4-SD7	3/8"	5/8"	3.04	1.38	0.75		4-PD7	3/8"	5/8"	2.56	0.84	0.75	
4-SD9	3/8"	11/16"	3.04	1.38	0.81		4-PD9	3/8"	11/16"	2.56	0.91	0.81	
4-SD11	3/8"	3/4"	3.04	1.38	0.88		4-PD11	3/8"	3/4"	2.56	0.98	0.88	
4-SD15	3/8"	7/8"	3.04	1.38	1.00		4-PD13	3/8"	13/16"	2.56	1.05	0.94	
4-SP13	1/2"	13/16"	3.67	1.38	0.94		4-PD15	3/8"	7/8"	2.56	1.12	1.00	
4-SP15	1/2"	7/8"	3.67	1.38	1.00		4-PP13	1/2"	13/16"	3.25	1.05	0.94	
4-SP17	1/2"	15/16"	3.67	1.38	1.06		4-PP15	1/2"	7/8"	3.25	1.12	1.00	
4-SP19	1/2"	1"	3.67	1.38	1.13		4-PP17	1/2"	15/16"	3.25	1.19	1.06	
							4-PP19	1/2"	1"	3.25	1.26	1.13	

†With Bleeder Ball Check – Reduces hose whip when disconnecting.

How to build a socket part number with options:

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: 4000 - BV - SL - 143



All dimensions in inches.



Series 6000 3/4" Nominal

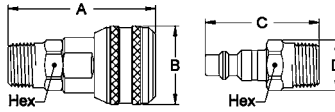
ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions		
		A	B	HEX
6300	1/2-14 NPTF	2.94	1.88	1.31
6500	3/4-14 NPTF	2.94	1.88	1.31
6700	1-11 1/2 NPTF	3.13	1.88	1.31

Male End Connections



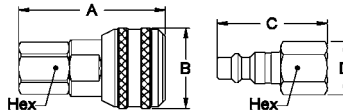
Part No.	Thread Size	Dimensions		
		C	D	HEX
64A	1/2-14 NPTF	2.31	1.15	1.00
64GA†	1/2-14 NPTF	3.26	1.12	1.00
66A	3/4-14 NPTF	2.38	1.23	1.06
66GA†	3/4-14 NPTF	3.26	1.19	1.06
68A	1-11 1/2 NPTF	2.56	1.52	1.31

Brass

B-64A	1/2-14 NPTF	2.31	1.12	1.00
B-66A	3/4-14 NPTF	2.38	1.19	1.06

Part No.	Thread Size	Dimensions		
		A	B	HEX
6200	1/2-14 NPTF	2.85	1.88	1.31
6400	3/4-14 NPTF	3.00	1.88	1.31
6600	1-11 1/2 NPTF	3.19	1.88	1.56

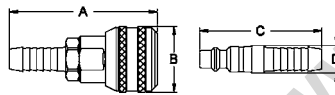
Female End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
65A	1/2-14 NPTF	2.22	1.15	1.00
65GA†	1/2-14 NPTF	3.35	1.12	1.00
67A	3/4-14 NPTF	2.22	1.37	1.19
67GA†	3/4-14 NPTF	3.38	1.33	1.19
69A	1-11 1/2 NPTF	2.41	1.80	1.56

Part No.	Hose I.D.	Dimensions	
		A	B
6800	1/2"	3.21	1.88
6900	3/4"	4.06	1.88
7000	1"	4.07	1.88

Hose Stem End Connections



Part No.	Hose I.D.	Dimensions	
		C	D
70A	1/2"	2.53	0.94
70GA†	1/2"	3.53	1.12
71A	3/4"	3.44	1.06
71GA†	3/4"	4.38	1.12
72A	1"	3.44	1.31

Brass

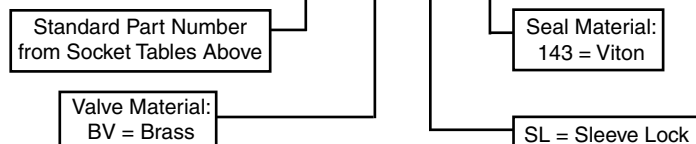
B-71A	3/4"	3.44	1.06
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†With Bleeder Ball Check – Reduces hose whip when disconnecting.

How to build a socket part number with options:

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: **6000 - BV - SL - 143**



All dimensions in inches.

Series P-30 & P-40

Industrial Interchange



ONE-WAY



Industrial Interchange Plastic Quick Connect Couplings designed for compressed air. Body sizes are 1/4" and 3/8".

Features

- Plastic socket body and plug
- Light-weight
- Less likely to damage painted or easily dented surfaces than metal couplings
- Easy, automatic, push-to-connect design provides instantaneous connection and disconnection of lines, plus automatic shut-off of socket end of line
- 1/4" socket accepts MIL-C-4109 plugs

Standard Materials

- Socket
 - Acetal Body
 - Polypropylene Sleeve
 - Zinc Plated Steel Valve
 - Buna-N (Nitrile) Seal
 - Stainless Steel Springs
- Plug
 - Acetal
 - Series P-30 accepts all Series 3000 plugs
 - Series P-40 accepts all Series 4000 plugs

Rated Pressure

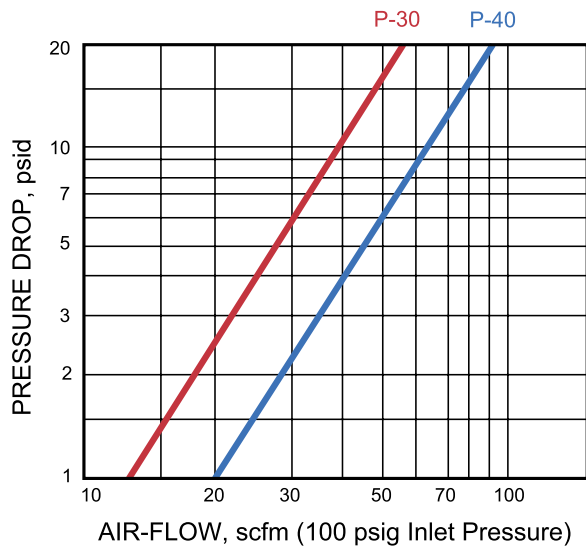
Series	Size	PSI	BAR
P-30	1/4"	150	10
P-40	3/8"	150	10

* At temperatures up to 125°

Flow Capacity

Series	† Ac
P-30	28
P-40	45

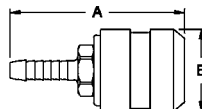
† Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure



Sockets

Hose Stem End Connections

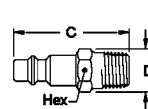
Part No.	Hose I.D.	Dimensions	
		A	B
P4-30S-25H	1/4"	2.66	1.25
P7-40S-37H	3/8"	2.82	1.44



Plugs

Male End Connections

Part No.	Thread Size	Dimensions		
		C	D	HEX
P4-30P-25M	1/4-18 NPTF	1.75	0.65	0.56
P7-40P-37M	3/8-18 NPTF	1.88	0.79	0.69





Series AUTO-FLO 23 & 24

1/4" Nominal

ONE-WAY



Auto-Flo 23 Socket



ARO 210 Interchange Plug



Industrial Interchange Plug



Tru-Flate Interchange Plug



Auto-Flo 24 Socket



Auto-Flo 24 Plug

High flow, automatic Quick-Connect Couplings designed for use with compressed air.

See page 9 for One-Way Plug Interchange Chart.

Features

- Auto-Flo 23 is the first automatic universal coupling designed to operate with Industrial, ARO 210 and Tru-Flate Interchange plugs
- Auto-Flo 24 operates with CEJN 320 and Rectus 25 Interchange plugs
- Easy, automatic, push-to-connect design provides instantaneous connection and disconnection of lines, plus automatic shut-off of socket end of line
- Sleeve guard protects against accidental disconnection

Standard Materials

- Socket
 - Brass Body
 - Brass Valve
 - Zinc Plated Steel Sleeve
 - Buna-N (Nitrile) Seals
 - Stainless Steel Springs
 - Stainless Steel Locking Balls
- Plug
 - Industrial Interchange (Series 3000)
 - Zinc Plated Case-Hardened Steel
 - Brass
 - Stainless Steel
 - ARO 210, Tru-Flate and CEJN/Rectus Interchanges
 - Zinc Plated Case-Hardened Steel

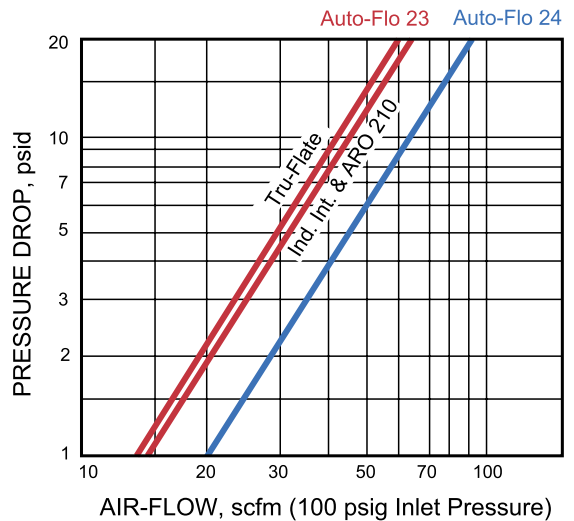
Pressure Ratings

Series	PSI	BAR
Auto-Flo 23	150	10
Auto-Flo 24	150	10

Flow Capacities

Plug Interchange	† Ac
Industrial	32
ARO 210	32
Tru-Flate	30
Auto-Flo 24	45

† Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure



Series AUTO-FLO 23 & 24

1/4" Nominal



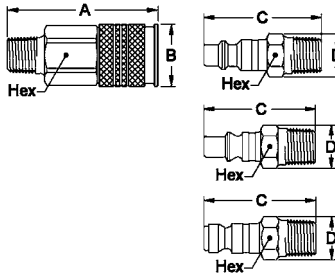
SOCKETS

Auto-Flo 23

PLUGS

Male End Connections

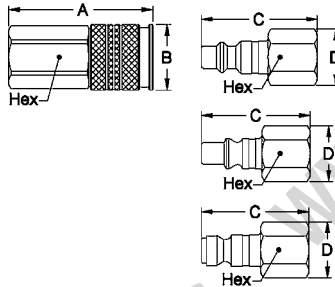
Part No.	Thread Size	Dimensions		
		A	B	HEX
B23AS-25M	1/4-18 NPTF	2.23	0.94	0.81
B23AS-25MBST	1/4-19 BSPT	2.23	0.94	0.81
B23AS-37M	3/8-18 NPTF	2.23	0.94	0.81
B23AS-37MBST	3/8-19 BSPT	2.23	0.94	0.81
B23AS-50MBST	1/2-14 BSPT	2.23	0.94	0.88



Part No.	Thread Size	Dimensions		
		C	D	HEX
INDUSTRIAL INTERCHANGE (Series 3000, page 15)				
2607	1/8-27 NPTF	1.42	0.58	0.50
2608	1/4-18 NPTF	1.68	0.65	0.56
2608B	1/4-19 BSPT	1.68	0.65	0.56
20AP-37M	3/8-18 NPTF	1.68	0.79	0.69
ARO 210 INTERCHANGE				
21AP-25M	1/4-18 NPTF	1.65	0.65	0.56
21AP-37M	3/8-18 NPTF	1.65	0.79	0.69
Tru-Flate INTERCHANGE				

Female End Connections

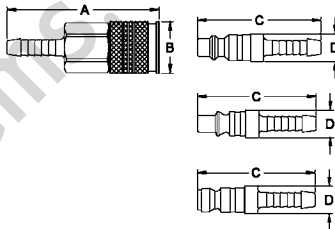
Part No.	Thread Size	Dimensions		
		A	B	HEX
B23AS-25F	1/4-18 NPTF	2.02	0.94	0.81
B23AS-25FBS	1/4-19 BSPP	2.02	0.94	0.81
B23AS-37F	3/8-18 NPTF	2.02	0.94	0.81
B23AS-37FBS	3/8-19 BSPP	2.02	0.94	0.81
B23AS-50FBS	3/8-14 BSPP	2.34	0.94	1.06



Part No.	Thread Size	Dimensions		
		C	D	HEX
INDUSTRIAL INTERCHANGE (Series 3000, page 15)				
2609	1/4-18 NPTF	1.55	0.79	0.69
2609B	1/4-19 BSPP	1.55	0.79	0.69
20AP-37F	3/8-18 NPTF	1.61	0.94	0.81
ARO 210 INTERCHANGE				
21AP-25F	1/4-18 NPTF	1.53	0.79	0.69
21AP-37F	3/8-18 NPTF	1.59	0.94	0.81
Tru-Flate INTERCHANGE				

Hose Stem End Connections

Part No.	Hose I.D.	Dimensions	
		A	B
B23AS-25H	1/4"	2.76	0.94
B23AS-31H	5/16"	2.73	0.94
B23AS-37H	3/8"	2.73	0.94
B23AS-50H	1/2"	2.70	0.94



Part No.	Hose I.D.	Dimensions	
		C	D
INDUSTRIAL INTERCHANGE (Series 3000, page 15)			
3946	1/4"	2.14	0.50
3947	5/16"	2.14	0.50
22238	3/8"	2.14	0.50
ARO 210 INTERCHANGE			
21AP-25H	1/4"	2.12	0.50
21AP-37H	3/8"	2.12	0.50
Tru-Flate INTERCHANGE			

ONE-WAY



Series AUTO-FLO 23 & 24

1/4" Nominal

ONE-WAY

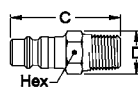
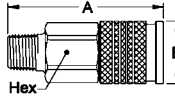
SOCKETS

Auto-Flo 24

PLUGS

Male End Connections

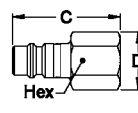
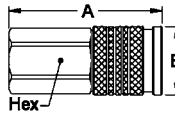
Part No. Brass	Thread Size	Dimensions		
		A	B	HEX
B24AS-25M	1/4-18 NPTF	2.27	0.94	0.81
B24AS-25MBST	1/4-19 BSPT	2.27	0.94	0.81
B24AS-37MBST	3/8-19 BSPT	2.27	0.94	0.81
B24AS-50MBST	1/2-14 BSPT	2.27	0.94	0.88



Part No. Steel	Thread Size	Dimensions		
		C	D	HEX
24AP-25MG	1/4-18 NPTF	1.64	0.65	0.56
24AP-25MBST	1/4-19 BSPT	1.62	0.65	0.56
24AP-37MBST	3/8-19 BSPT	1.62	0.79	0.69
24AP-50MBST	1/2-14 BSPT	1.88	1.01	0.88

Female End Connections

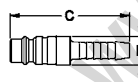
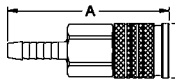
Part No. Brass	Thread Size	Dimensions		
		A	B	HEX
B24AS-25F	1/4-18 NPTF	2.06	0.94	0.81
B24AS-25FBS	1/4-19 BSPP	2.06	0.94	0.81
B24AS-37FBS	3/8-19 BSPP	2.06	0.94	0.81
B24AS-50FBS	1/2-14 BSPP	2.38	0.94	1.06



Part No. Steel	Thread Size	Dimensions		
		C	D	HEX
24AP-25FG	1/4-18 NPTF	1.49	0.79	0.69
24AP-25FBS	1/4-19 BSPP	1.46	0.79	0.69
24AP-37FBS	3/8-19 BSPP	1.52	0.94	0.81
24AP-50FBS	1/2-14 BSPP	1.65	1.23	1.06

Hose Stem End Connections

Part No. Brass	Hose I.D.	Dimensions	
		A	B
B24AS-25H	1/4"	2.80	0.94
B24AS-31H	5/16"	2.77	0.94
B24AS-37H	3/8"	2.77	0.94
B24AS-50H	1/2"	2.74	0.94



Part No. Steel	Hose I.D.	Dimensions	
		C	D
24AP-25H	1/4"	2.08	0.50
24AP-31H	5/16"	2.08	0.50
24AP-37H	3/8"	2.08	0.50
24AP-50H	1/2"	2.08	0.63

Series SAFELINE

1/4" Industrial Interchange



ONE-WAY



The SAFELINE Industrial Interchange pushbutton safety coupling is designed for use with compressed air.

Features

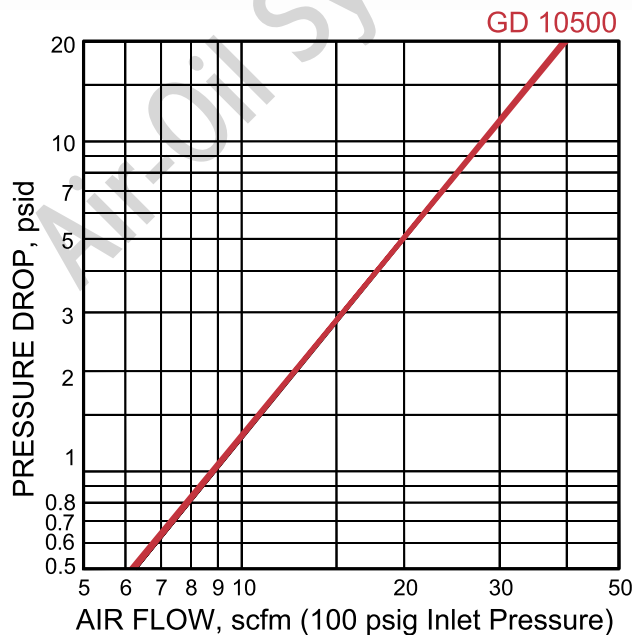
- Safe and easy to connect and disconnect. Two-step disconnect procedure shuts off air supply and releases downstream air pressure before plug can be removed from socket. Hose whip is prevented.
- Light weight, compact ergonomic design
- Accepts 1/4" MIL-C-4109 plugs

Operation

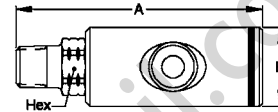
- To connect: Push plug into socket
- To disconnect: (1) Push button on side of socket. Air supply is shut off and plug pops out 3/16 inch, but is not released from socket. Downstream air is vented. (2) Push plug into socket to release latch. Pull plug from socket.

Standard Materials

- Socket
 - Aluminum and steel construction
 - Buna-N (Nitrile) Seals
- Plug: Use Series 3000 Plugs

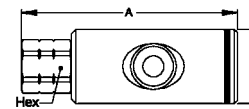


Male End Connections



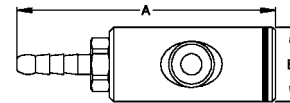
Part No.	Thread	Dimensions		
	Thread Size	A	B	HEX
GD 10536 41	1/4-18 NPTF	3.18	1.02	0.67
GD 10536 83	3/8-18 NPTF	3.18	1.02	0.75

Female End Connections



Part No.	Thread	Dimensions		
	Thread Size	A	B	HEX
GD 10526 41	1/4-18 NPTF	2.97	1.02	0.67
GD 10526 83	3/8-18 NPTF	3.18	1.02	0.87

Hose Stem End Connections



Part No.	Hose I.D.	Dimensions	
		A	B
GD 10556 67	1/4"	3.56	1.02
GD 10556 01	3/8"	3.56	1.02

Rated Pressure

Series	PSI	Bar
GD 10500	232	16

Flow Capacity

Series	† Ac
GD 10500	20

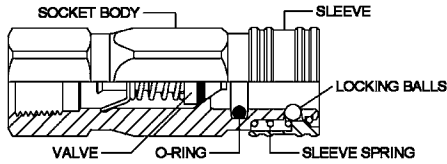
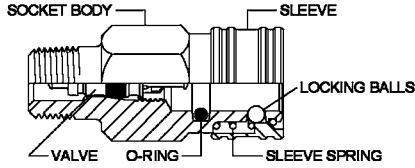
† Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure



Series 180 & 280

1/8" Nominal

ONE-WAY



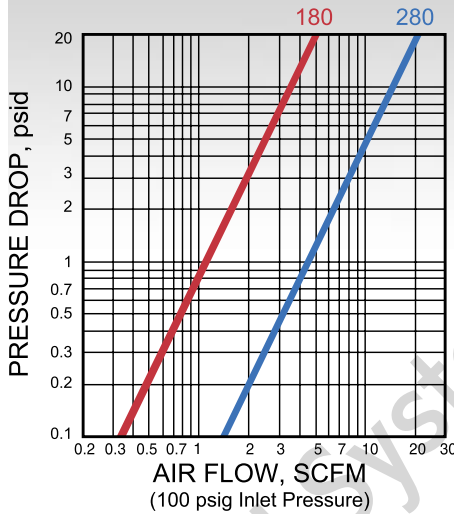
Miniature Ball Lock Quick-Connect Couplings designed for use with compressed air, gases and liquids.

Features

- Ball lock
- Manual operation
- Series 180 and 280 sockets mate with all Series 180 plugs
- Series 180 socket has a tire valve. Series 280 socket has a 1-HK valve, which provides higher flow capacity.
- Viton seals available as an option. Add -143 suffix to socket part number when ordering.

Standard Materials

- Socket
 - Brass Body and Sleeve
 - Valve
 - 180: Nickel Plated Brass Tire Valve
 - 280: Brass Series 1-HK Valve
 - Buna-N (Nitrile) Seals
 - Stainless Steel Springs
 - Stainless Steel Locking Balls
- Plug
 - Brass



Rated Pressure

Series	PSI	BAR
180	700	48
280	3,000	207

Flow Capacity

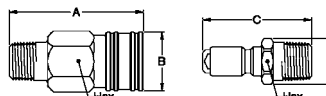
Series	† Ac
180	2.5
280	10.0

† Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure

SOCKETS

Part No.	Thread Size	Dimensions		
		A	B	HEX
180	1/8-27 NPTF	1.41	0.63	0.56
28S-25M	1/4-18 NPTF	1.38	0.63	0.56

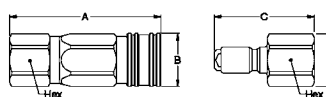
Male End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
185	1/8-27 NPTF	1.16	0.49	0.44
186	1/4-18 NPTF	1.44	0.63	0.56

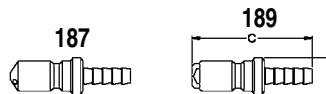
Part No.	Thread Size	Dimensions		
		A	B	HEX
28S-12F	1/8-27 NPTF	1.78	0.63	0.56

Female End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
183	1/8" NPTF	1.19	0.63	0.56

Hose Stem End Connections



Part No.	Hose I.D.	Dimensions	
		C	D
187	1/8"	1.25	0.38
189	3/16"	1.50	0.38

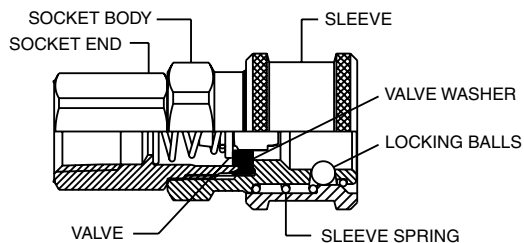
All dimensions in inches.

Series 100

1/4" Nominal



ONE-WAY



Quick-Connect Coupling designed for applications where non-interchange with other couplings is a requirement.

Features

- Ball lock
- Manual operation
- Non-interchangeable design prevents crossing of lines

Standard Materials

- Socket
 - Brass Body
 - Brass Valve
 - Brass Sleeve
 - Buna-N (Nitrile) Seal
 - Stainless Steel Springs
 - Stainless Steel Locking Balls
- Plug
 - Brass

Accessories

- Dust caps and dust plugs (See page 68)

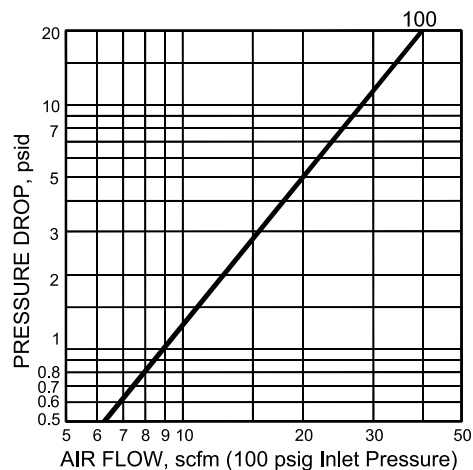
Rated Pressure

Series	PSI	BAR
100	350	24

Flow Capacity

Series	‡Ac
100	20

‡ Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure





Series 100

1/4" Nominal

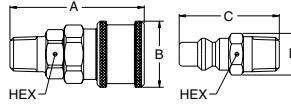
ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions		
		A	B	HEX
101	1/8-27 NPTF	1.94	1.00	0.69
103	1/4-18 NPTF	2.09	1.00	0.69
105	3/8-18 NPTF	2.09	1.00	0.69
100-63	5/8-18* NPTF	2.16	1.00	0.69

Male End Connections

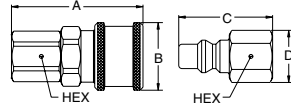


Part No.	Thread Size	Dimensions		
		C	D	HEX
1G1	1/8-27 NPTF	1.38	0.65	0.56
1G3	1/4-18 NPTF	1.56	0.65	0.56
1G5	3/8-18 NPTF	1.56	0.79	0.69

*45° Male Flare

Part No.	Thread Size	Dimensions		
		A	B	HEX
100	1/8-27 NPTF	1.78	—	0.69
102	1/4-18 NPTF	2.00	—	0.69
104	3/8-18 NPTF	2.06	—	0.75

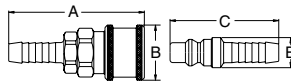
Female End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
1G2	1/4-18 NPTF	1.43	0.79	0.69

Part No.	Hose I.D.	Dimensions	
		A	B
110	1/4"	2.53	1.00
111	5/16"	2.53	1.00
112	3/8"	2.52	1.00

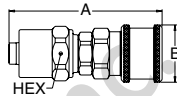
Hose Stem End Connections



Part No.	Hose I.D.	Dimensions	
		C	E
1G10	1/4"	2.00	0.56
1G12	3/8"	2.03	0.56

Part No.	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX
1-GB3	1/4"	1/2"	2.62	1.00	0.63
1-GB7	1/4"	5/8"	2.62	1.00	0.75
1-GD7	3/8"	5/8"	2.75	1.00	0.75
1-GD9	3/8"	11/16"	2.75	1.00	0.81

Hose Clamp End Connections

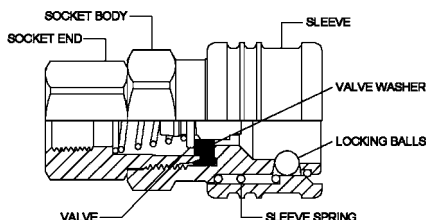


Series 600 & 700

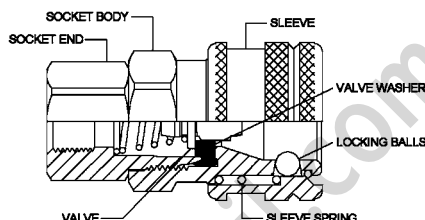
1/4" Nominal



Series 600



Series 700



ONE-WAY

Quick-Connect Couplings designed for use in oxyacetylene service.

Series 600 is used with oxygen.

Series 700 is used with acetylene.

Features

- Ball lock
- Manual operation
- Non-interchangeable designs prevent crossing of lines
- Sleeves are color coded to identify each series:
 - Series 600 sleeves are green for oxygen
 - Series 700 sleeves are red for acetylene
- Socket part numbers with the prefix **UL** are UL listed for their intended usage
- Sockets having part numbers with the **UL** prefix or **SL** suffix have the sleeve lock feature to prevent accidental disconnection
- Sockets with hose connections cannot be UL listed
- Series 600 and 700 couplings can also be used with compressed air and other gases

Standard Materials

- Socket
 - Brass Body
 - Brass Valve
 - Painted Brass Sleeve
 - Green - Series 600
 - Red - Series 700
 - Buna-N (Nitrile) Seal
 - Stainless Steel Springs
 - Stainless Steel Locking Balls
- Plug
 - Brass

Accessories

- Dust caps and dust plugs (See page 68)

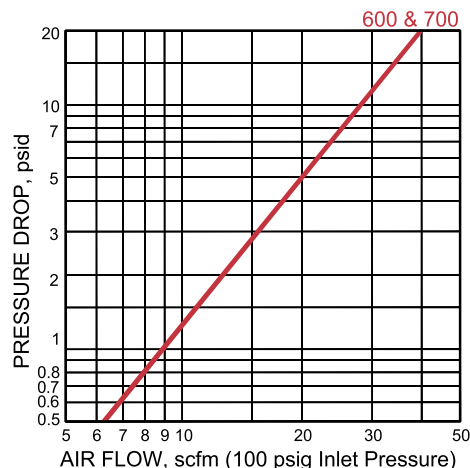
Rated Pressure

Series	PSI	BAR
600 & 700	1,500	103

Flow Capacity

Series	‡ Ac
600 & 700	20

‡ Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure





Series 600

1/4" Nominal

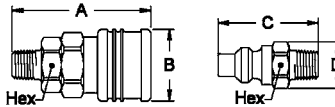
ONE-WAY

SOCKETS

PLUGS

Part No. - Brass		Thread Oxygen Serv.	Dimensions Size	Dimensions		
Standard	Oxygen Serv.			A	B	HEX
GR-601	UL-601	1/8-27 NPTF	1.94	1.00	0.69	
GR-603	UL-603	1/4-18 NPTF	2.09	1.00	0.69	
GR-604R	UL-604R	9/16-18†	1.97	1.00	0.69	
GR-605	UL-605	3/8-18 NPTF	2.09	1.00	0.69	

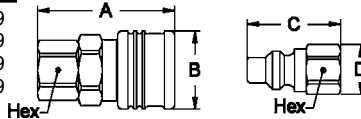
Male End Connections



Part No.		Thread Brass	Dimensions Size	Dimensions		
Brass	Oxygen Serv.			C	D	HEX
01A		1/8-27 NPTF	1.41	0.63	0.56	
03A		1/4-18 NPTF	1.56	0.63	0.56	
04-R		9/16-18†	1.41	0.63	0.56	

Part No. - Brass		Thread Oxygen Serv.	Dimensions Size	Dimensions		
Standard	Oxygen Serv.			A	B	HEX
GR-600	UL-600	1/8-27 NPTF	1.78	1.00	0.69	
GR-602	UL-602	1/4-18 NPTF	2.00	1.00	0.69	
GR-604	UL-604	3/8-18 NPTF	2.06	1.00	0.69	
GR-605R	UL-605R	9/16-18‡	2.00	1.00	0.69	

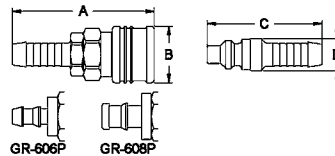
Female End Connections



Part No.		Thread Brass	Dimensions Size	Dimensions		
Brass	Oxygen Serv.			C	D	HEX
00A		1/8-27 NPTF	1.22	0.63	0.56	
02A		1/4-18 NPTF	1.41	0.77	0.69	
05-R		9/16-18‡	1.38	0.77	0.69	

Part No. - Brass		Hose Oxygen Serv.	Dimensions I.D.	Dimensions	
Standard	Oxygen Serv.			A	B
GR-606	GR-606-SL	1/4"	2.53	1.00	
GR-606P§	GR-606P-SL§	1/4"	2.31	1.00	
GR-607	GR-607-SL	5/16"	2.53	1.00	
GR-608	GR-608-SL	3/8"	2.52	1.00	
GR-608P§	—	3/8"	2.41	1.00	

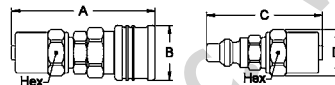
Hose Stem End Connections



Part No.		Hose I.D.	Dimensions	
Brass	Oxygen Serv.		C	D
07A		1/4"	2.03	0.56
08A		5/16"	2.03	0.56
09A		3/8"	2.04	0.56

Part No. - Brass		Hose Oxygen Serv.	Dimensions I.D. O.D.	Dimensions		
Standard	Oxygen Serv.			A	B	HEX
GR-6-0A3	—	3/16"	1/2"	2.56	1.00	0.63
GR-6-0B3	GR-6-0B3-SL	1/4"	1/2"	2.62	1.00	0.63
GR-6-0B5	GR-6-0B5-SL	1/4"	9/16"	2.62	1.00	0.69
GR-6-0B7	GR-6-0B7-SL	1/4"	5/8"	2.62	1.00	0.75
GR-6-0C5	—	5/16"	9/16"	2.69	1.00	0.69
GR-6-0C7	—	5/16"	5/8"	2.69	1.00	0.75
GR-6-0C9	—	5/16"	11/16"	2.69	1.00	0.81
GR-6-0D7	—	3/8"	5/8"	2.75	1.00	0.75
GR-6-0D9	—	3/8"	11/16"	2.75	1.00	0.81
GR-6-0D11	—	3/8"	3/4"	2.75	1.00	0.88

Hose Clamp End Connections

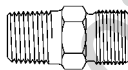


Part No.		Hose I.D. O.D.	Dimensions		
Brass	Oxygen Serv.		C	D	HEX
6-B3		1/4" 1/2"	2.13	0.70	0.63
6-B5		1/4" 9/16"	2.13	0.77	0.69
6-B7		1/4" 5/8"	2.13	0.84	0.75
6-B9		1/4" 11/16"	2.13	0.91	0.81
6-D5		3/8" 9/16"	2.25	0.77	0.69
6-D7		3/8" 5/8"	2.25	0.84	0.75
6-D9		3/8" 11/16"	2.25	0.91	0.81
6-D11		3/8" 3/4"	2.25	0.98	0.88

*45° Male Flare †R.H. Thread - 30° Female Flare ‡R.H. Thread - Inverted Flare §For use with push-on style hose.

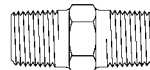
Fittings

Oxygen Adapters—Brass



Part No.	Connection
9-MBR	1/4" MPT x 9/16"-18 RHT

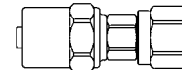
Pipe-to-Pipe Adapters—Brass



Part No.	Connection
18-MAM	1/8" MPT x 1/4" MPT
19-MBM	1/4" MPT x 1/4" MPT
20-MBM	1/4" MPT x 3/8" MPT

Swivel Nut Hose Clamps

9/16"-18 Right-Hand Thread for Oxygen Service



Part No.	I.D. Hose	O.D. Hose
4RA0	3/16"	7/16"
4RA3	3/16"	1/2"
4RB1	1/4"	15/32"
4RB3	1/4"	1/2"
4RB5	1/4"	9/16"
4RB7	1/4"	5/8"
4RD7	3/8"	5/8"
4RD9	3/8"	11/16"
4RD11	3/8"	3/4"

Series UL-600 and UL-700 Couplings with sleeve lock feature comply with O.S.H.A. requirements, Sec. 1915.35 (f)(5), 1916.35 (f)(5), 1917.35 (f)(5), and 1926.350 (f)(5); and are Underwriters' Laboratories, Inc. listed for use with oxy-acetylene welding and cutting apparatus, file SA 1296.

WARNING

Oxygen increases combustibility. Fire and explosion could occur causing severe bodily injury or death. Be sure to select the proper coupling for your application and use it only within the specified service pressure range.

Series UL-600 couplings are not to be used with oxygen at pressures exceeding 100 psig in order to comply with UL listings.

Series 700

1/4" Nominal



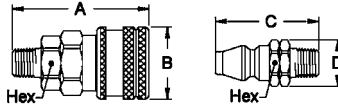
ONE-WAY

SOCKETS

PLUGS

Part No. - Brass		Thread Size	Dimensions		
Standard	Acetyl. Serv.		A	B	HEX
RD-701	—	1/8-27 NPTF	1.94	1.00	0.69
RD-703	UL-703	1/4-18 NPTF	2.09	1.00	0.69
RD-704L	UL-704L	9/16-18†	1.97	1.00	0.69
RD-705	UL-705	3/8-18 NPTF	2.09	1.00	0.69

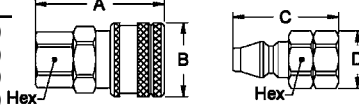
Male End Connections



Part No.		Thread Size	Dimensions		
Brass			C	D	HEX
A1		1/8-27 NPTF	1.47	0.63	0.56
A3P		1/4-18 NPTF	1.63	0.63	0.56
A4-L		9/16-18†	1.50	0.63	0.56

Part No. - Brass		Thread Size	Dimensions		
Standard	Acetyl. Serv.		A	B	HEX
RD-700	UL-700	1/8-27 NPTF	1.78	1.00	0.69
RD-702	UL-702	1/4-18 NPTF	2.00	1.00	0.69
RD-704	UL-704	3/8-18 NPTF	2.06	1.00	0.69
RD-705L	UL-705L	9/16-18†	2.00	1.00	0.69

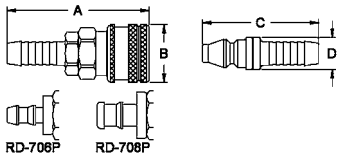
Female End Connections



Part No.		Thread Size	Dimensions		
Brass			C	D	HEX
A2		1/4-18 NPTF	1.46	0.77	0.69
A5-L		9/16-18†	1.38	0.77	0.69

Part No. - Brass		Hose I.D.	Dimensions	
Standard	Acetyl. Serv.		A	B
RD-706	RD-706-SL	1/4"	2.53	1.00
RD-706P	—	1/4"	2.31	1.00
RD-707	RD-707-SL	5/16"	2.53	1.00
RD-708	RD-708-SL	3/8"	2.52	1.00

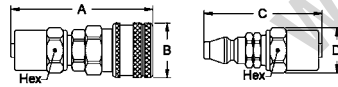
Hose Stem End Connections



Part No.		Hose I.D.	Dimensions	
Brass			C	D
A7		1/4"	2.06	0.56
A8		5/16"	2.06	0.56
A9		3/8"	2.10	0.56

Part No. - Brass		Hose		Dimensions		
Standard	Acetyl. Serv.	I.D.	O.D.	A	B	HEX
RD-7-0A3	—	3/16"	1/2"	2.56	1.00	0.63
RD-7-0B3	RD-7-0B3-SL	1/4"	1/2"	2.62	1.00	0.63
RD-7-0B5	RD-7-0B5-SL	1/4"	9/16"	2.62	1.00	0.69
RD-7-0B7	—	1/4"	5/8"	2.62	1.00	0.75
RD-7-0D7	—	3/8"	5/8"	2.75	1.00	0.75
RD-7-0D9	—	3/8"	11/16"	2.75	1.00	0.81
RD-7-0D11	—	3/8"	3/4"	2.75	1.00	0.88

Hose Clamp End Connections

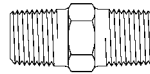


Part No.		Hose		Dimensions		
Brass		I.D.	O.D.	C	D	HEX
7-B3		1/4"	1/2"	2.19	0.70	0.63
7-B5		1/4"	9/16"	2.19	0.77	0.69
7-B7		1/4"	5/8"	2.19	0.84	0.75
7-B11		1/4"	3/4"	2.19	0.98	0.88

†L.H. Thread - 30° Female Flare ‡L.H. Thread - Inverted Flare §For use with push-on style hose.

Fittings

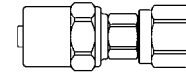
Pipe-to-Pipe Adapters—Brass



Part No.	Connection
18-MAM	1/8" MPT x 1/4" MPT
19-MBM	1/4" MPT x 1/4" MPT
20-MBM	1/4" MPT x 3/8" MPT

Swivel Nut Hose Clamps

9/16"-18 Left-Hand Thread for Acetylene Service



Part No.	I.D. Hose	O.D. Hose
4LA0	3/16"	7/16"
4LA3	3/16"	1/2"
4LB3	1/4"	1/2"
4LB5	1/4"	9/16"

Series UL-600 and UL-700 Couplings with sleeve lock feature comply with O.S.H.A. requirements, Sec. 1915.35 (f)(5), 1916.35 (f)(5), 1917.35 (f)(5), and 1926.350 (f)(5); and are Underwriters' Laboratories, Inc. listed for use with oxyacetylene welding and cutting apparatus, file SA 1296.

WARNING

Acetylene is combustible. Fire and explosion could occur causing severe bodily injury or death. Be sure to select the proper coupling for your application and use it only within the specified service pressure range.

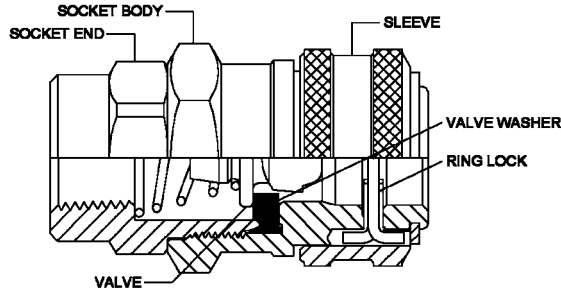
Series UL-700 couplings are not to be used with acetylene at pressures exceeding 15 psig in order to comply with UL listings.

All dimensions in inches.



Series 2RL & 3RL

ONE-WAY



Ring-Lock Quick-Connect Couplings have a unique interchange which Hansen designed for use with compressed air. Body sizes are 1/4" and 3/8".

Features

- High flow capacity
 - 2RL flow equals that of most 3/8" couplings
 - 3RL flow equals that of most 1/2" couplings
- Ring lock
- Push to connect
- Will not disconnect when hose is dragged on the ground
- Rotate locking sleeve approximately 20° to disconnect
- Optional seal materials available

Standard Materials

- Socket
 - Zinc Plated Steel Body
 - Brass Socket End
 - Nickel Plated Steel Sleeve
 - Zinc Plated Steel Valve
 - Buna-N (Nitrile) Seal
 - Stainless Steel Spring
 - Zinc Plated Steel Locking Ring
- Plug
 - Zinc Plated Case-Hardened Steel

Accessories

- Dust caps and dust plugs (See page 68)

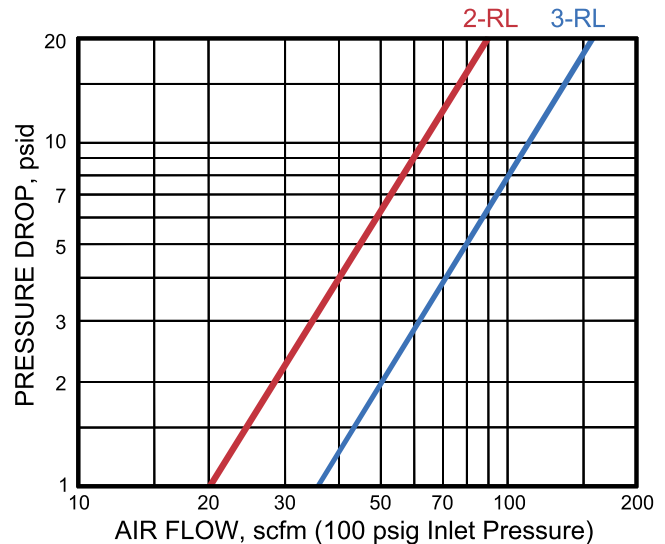
Rated Pressure

Series	Size	PSI	BAR
2-RL	1/4"	300	20
3-RL	3/8"	300	20

Flow Capacity

Series	‡ Ac
2-RL	48
3-RL	80

‡ Air flow (scfm) with 5 psi pressure drop and 100 psig inlet pressure



Series 2RL 1/4" Nominal



ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions			Male End Connections		Part No. Steel	Thread Size	Dimensions		
		A	B	HEX					C	D	HEX
2-R10	1/8-27 NPTF	2.01	1.06	0.88			2-L10	1/8-27 NPTF	1.51	0.58	0.50
2-R15	1/4-18 NPTF	2.16	1.06	0.88			2-L15	1/4-18 NPTF	1.66	0.65	0.56
2-R20	3/8-18 NPTF	2.16	1.06	0.88			2-L15G†	1/4-18 NPTF	2.64	0.77	0.69
2-R25	1/2-14 NPTF	2.35	1.06	0.88			2-L20	3/8-18 NPTF	2.04	0.79	0.69
							2-L20G†	3/8-18 NPTF	2.64	0.77	0.69
							2-L25	1/2-14 NPTF	2.31	1.01	0.88

Part No.	Thread Size	Dimensions			Female End Connections		Part No. Steel	Thread Size	Dimensions		
		A	B	HEX					C	D	HEX
2-R11	1/8-27 NPTF	1.91	1.06	0.88			2-L11	1/8-27 NPTF	1.36	0.65	0.56
2-R16	1/4-18 NPTF	1.91	1.06	0.88			2-L16	1/4-18 NPTF	1.54	0.79	0.69
2-R21	3/8-18 NPTF	2.16	1.06	0.88			2-L16G†	1/4-18 NPTF	2.55	0.77	0.69
2-R26	1/2-14 NPTF	2.43	1.06	1.00			2-L21	3/8-18 NPTF	1.88	0.94	0.81
							2-L26	1/2-14 NPTF	2.18	1.15	1.00

Part No.	Hose I.D.	Dimensions		Hose Stem End Connections		Part No. Steel	Hose I.D.	Dimensions	
		A	B					C	D
2-R17	1/4"	2.63	1.06			2-L17	1/4"	2.13	0.56
2-R195	5/16"	2.63	1.06			2-L195	5/16"	2.13	0.56
2-R22	3/8"	2.63	1.06			2-L22	3/8"	2.13	0.56
2-R27	1/2"	2.63	1.06			2-L27	1/2"	2.50	0.81

Part No.	Hose		Dimensions			Hose Clamp End Connections		Part No. Steel	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX				I.D.	O.D.	C	D	HEX
2-R18B1	1/4"	15/32"	2.73	1.06	0.63			2-L18B1	1/4"	15/32"	2.23	0.70	0.63
2-R18B3	1/4"	1/2"	2.73	1.06	0.63			2-L18B3	1/4"	1/2"	2.23	0.70	0.63
2-R18B5	1/4"	9/16"	2.73	1.06	0.69			2-L18B5	1/4"	9/16"	2.23	0.77	0.69
2-R18B7	1/4"	5/8"	2.73	1.06	0.75			2-L18B7	1/4"	5/8"	2.23	0.84	0.75
2-R18B9	1/4"	11/16"	2.73	1.06	0.81			2-L18B9	1/4"	11/16"	2.23	0.91	0.81
2-R18B11	1/4"	3/4"	2.73	1.06	0.88			2-L18B11	1/4"	3/4"	2.23	0.98	0.88
2-R185C5	5/16"	9/16"	2.79	1.06	0.69			2-L185C5	5/16"	9/16"	2.29	0.77	0.69
2-R185C7	5/16"	5/8"	2.79	1.06	0.75			2-L185C7	5/16"	5/8"	2.29	0.84	0.75
2-R185C9	5/16"	11/16"	2.79	1.06	0.81			2-L185C9	5/16"	11/16"	2.29	0.91	0.81
2-R23D5	3/8"	9/16"	2.85	1.06	0.69			2-L23D5	3/8"	9/16"	2.35	0.77	0.69
2-R23D7	3/8"	5/8"	2.85	1.06	0.75			2-L23D7	3/8"	5/8"	2.35	0.84	0.75
2-R23D9	3/8"	11/16"	2.85	1.06	0.81			2-L23D9	3/8"	11/16"	2.35	0.91	0.81
2-R23D11	3/8"	3/4"	2.85	1.06	0.88			2-L23D11	3/8"	3/4"	2.35	0.98	0.88
2-R23D13	3/8"	13/16"	2.85	1.06	0.94			2-L23D13	3/8"	13/16"	2.35	1.05	0.94
2-R23D15	3/8"	7/8"	2.85	1.06	1.00			2-L23D15	3/8"	7/8"	2.35	1.12	1.00
2-R28P13	1/2"	13/16"	3.48	1.06	0.94			2-L28P13	1/2"	13/16"	3.41	1.05	0.94
2-R28P15	1/2"	7/8"	3.48	1.06	1.00	2-L28P15	1/2"	7/8"	3.41	1.12	1.00		

†With Bleeder Ball Check – Reduces hose whip when disconnecting.

How to build a socket part number with options:

- Notes:
- Some part numbers may be subject to minimum order quantities.
 - Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: 2-R16 - 143

Standard Part Number
from Socket Tables Above

Seal Material:
138 = Silicone
143 = Viton
192 = EPDM

All dimensions in inches.



Series 3RL 3/8" Nominal

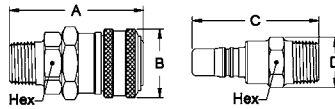
ONE-WAY

SOCKETS

PLUGS

Part No.	Thread Size	Dimensions		
		A	B	HEX
3-R15	1/4-18 NPTF	2.34	1.31	1.00
3-R20	3/8-18 NPTF	2.35	1.31	1.00
3-R25	1/2-14 NPTF	2.54	1.31	1.00
3-R30	3/4-14 NPTF	2.54	1.31	1.06

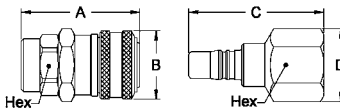
Male End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
3-L10	1/8-27 NPTF	1.54	0.72	0.63
3-L15	1/4-18 NPTF	1.70	0.72	0.63
3-L15G†	1/4-18 NPTF	2.64	0.98	0.88
3-L20	3/8-18 NPTF	1.76	0.79	0.69
3-L20G†	3/8-18 NPTF	2.64	0.98	0.88
3-L25	1/2-14 NPTF	2.31	1.01	0.88
3-L25G†	1/2-14 NPTF	2.83	0.98	0.88
3-L30	3/4-14 NPTF	2.38	1.23	1.06
3-L30G†	3/4-14 NPTF	2.88	1.19	1.06

Part No.	Thread Size	Dimensions		
		A	B	HEX
3-R16	1/4-18 NPTF	2.29	1.31	1.00
3-R21	3/8-18 NPTF	2.35	1.31	1.00
3-R26	1/2-14 NPTF	2.63	1.31	1.00
3-R31A	3/4-14 NPTF	2.66	1.31	1.19

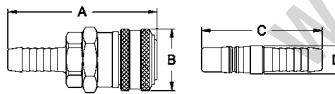
Female End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
3-L16	1/4-18 NPTF	1.48	0.79	0.69
3-L16G†	1/4-18 NPTF	2.39	0.98	0.88
3-L21	3/8-18 NPTF	1.63	0.94	0.81
3-L21G†	3/8-18 NPTF	2.64	0.98	0.88
3-L26	1/2-14 NPTF	2.25	1.15	1.00
3-L26G†	1/2-14 NPTF	2.91	0.98	0.88
3-L31	3/4-14 NPTF	2.25	1.37	1.19

Part No.	Hose I.D.	Dimensions	
		A	B
3-R17	1/4"	2.82	1.31
3-R195	5/16"	2.85	1.31
3-R22	3/8"	2.89	1.31
3-R27	1/2"	2.81	1.31
3-R32	3/4"	3.66	1.31

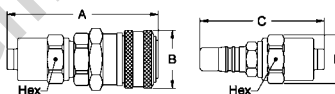
Hose Stem End Connections



Part No.	Hose I.D.	Dimensions	
		C	D
3-L17	1/4"	2.16	0.63
3-L195	5/16"	2.16	0.63
3-L195G†	5/16"	3.11	0.98
3-L22	3/8"	2.16	0.75
3-L22G†	3/8"	3.11	0.98
3-L27	1/2"	2.16	0.81
3-L27G†	1/2"	3.11	0.98
3-L32	3/4"	3.13	1.00
3-L32G†	3/4"	3.96	0.98

Part No.	Hose		Dimensions		
	I.D.	O.D.	A	B	HEX
3-R23D5	3/8"	9/16"	3.06	1.31	0.69
3-R23D7	3/8"	5/8"	3.06	1.31	0.75
3-R23D9	3/8"	11/16"	3.06	1.31	0.81
3-R23D11	3/8"	3/4"	3.06	1.31	0.88
3-R23D13	3/8"	13/16"	3.06	1.31	0.94
3-R23D15	3/8"	7/8"	3.06	1.31	1.00
3-R28P13	1/2"	13/16"	3.66	1.31	0.94
3-R28P15	1/2"	7/8"	3.66	1.31	1.00
3-R28P17	1/2"	15/16"	3.66	1.31	1.06
3-R28P19	1/2"	1"	3.66	1.31	1.13
3-R33R23	3/4"	1 1/8"	3.79	1.31	1.25
3-R33R25	3/4"	1 3/16"	3.79	1.31	1.31
3-R33R27	3/4"	1 1/4"	3.79	1.31	1.38

Hose Clamp End Connections



Part No.	Hose		Dimensions		
	I.D.	O.D.	C	D	HEX
3-L23D5	3/8"	9/16"	2.45	0.77	0.69
3-L23D7	3/8"	5/8"	2.45	0.84	0.75
3-L23D9	3/8"	11/16"	2.45	0.91	0.81
3-L23D11	3/8"	3/4"	2.45	0.98	0.88
3-L23D13	3/8"	13/16"	2.45	1.05	0.94
3-L23D15	3/8"	7/8"	2.45	1.12	1.00
3-L28P13	1/2"	13/16"	3.14	1.05	0.94
3-L28P15	1/2"	7/8"	3.14	1.12	1.00
3-L28P17	1/2"	15/16"	3.14	1.19	1.06
3-L28P19	1/2"	1"	3.14	1.26	1.13
3-L33R23	3/4"	1 1/8"	3.56	1.40	1.25
3-L33R25	3/4"	1 3/16"	3.56	1.47	1.31
3-L33R27	3/4"	1 1/4"	3.56	1.54	1.38

†With Bleeder Ball Check – Reduces hose whip when disconnecting.

How to build a socket part number with options:

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: 3-R21 - 143

Standard Part Number
from Socket Tables Above

Seal Material:
143 = Viton

All dimensions in inches.

TWO-WAY COUPLINGS



Air-Oil Systems, Inc. www.airoil.com



Contents and Selector Chart

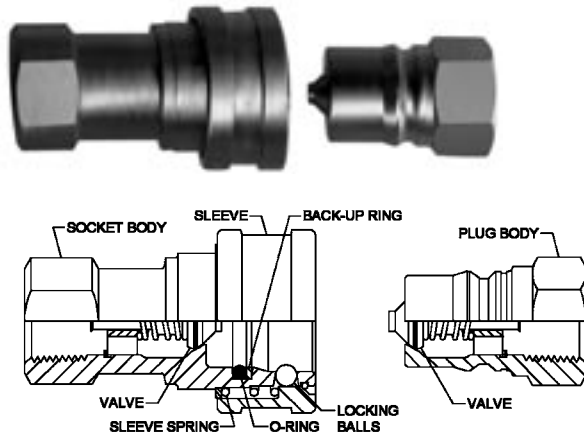
TWO-WAY

Coupling Series	Page	Coupling Style			Body Size								Body Material				Locking Mechanism			Options			
		MANUAL CONNECT	PUSH-TO-CONNECT	MINIMUM SPILL/INCLUSION	1/8 INCH	1/4 INCH	3/8 INCH	1/2 INCH	3/4 INCH	1 INCH	1 1/4 INCH	1 1/2 INCH	2 1/4 INCH	BRASS	STEEL (Zinc/Chromate Finish)	STAINLESS STEEL (303)	STAINLESS STEEL (316)	PLASTIC (Polypropylene)	BALL LOCK	THREADED SLEEVE	PLASTIC FINGERS	SLEEVE LOCK	SEAL MATERIALS (Various)
1-HK	35	•			•								•	•	•	•		•			•	•	•
2-HK	35	•				•							•	•	•	•		•			•	•	•
P2-HK	35	•				•											•			•		•	•
3-HK	35	•					•						•	•	•	•		•			•	•	•
4-HKP	35	•						•					•	•	•	•		•			•	•	•
6-HKP	35	•							•				•	•	•	•		•			•	•	•
8-HKP	35	•								•			•	•	•	•		•			•	•	•
10-HK	38	•									•		•	•	•			•			•	•	
12-HK	38	•										•	•	•	•			•			•	•	•
20-HK	38	•											•	•	•			•			•	•	•
HA 15000	40	•				•	•	•	•	•				•				•					•
FF	42		•	•		•	•	•	•	•				•				•			★	•	•
96	44	•		•					•	•	•		•					•					
UP	45	•				•								•				•			★		•
WA 56000	46	•				•	•							•					•				•
2-HKIG	48	•				•									•			•				•	•
2-HKIL	48	•				•									•			•				•	•
4-DB	49		•	•				•									•	•				•	
8-DB	49		•	•					•								•	•				•	
WA 10000	50	•		•				•	•	•				•				•				•	•

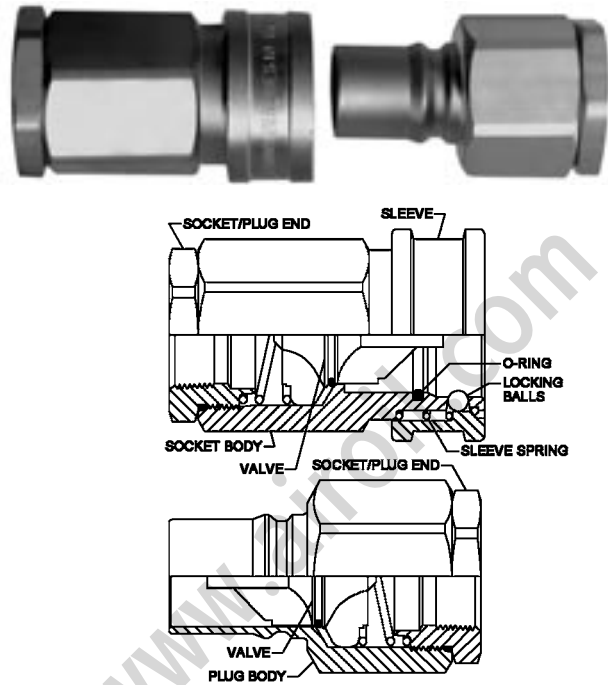
★ Sleeve lock is standard.



Series 1-HK to 8-HKP



Series 10-HK, 12-HK & 20-HK



TWO-WAY

Series HK Couplings are designed for general purpose hydraulic service. Some are suitable for use with various liquids, chemicals, steam, gases and vacuum. Series HK couplings conform to the dimensional requirements of ISO 7241-1 Series B. Body sizes range from 1/8" to 2 1/2".

Features

- Brass, steel and stainless steel construction available in all sizes; polypropylene available in 1/4" body size
- End connections are female NPTF, BSPP and SAE o-ring boss
- UL listed couplings for use on LP gas fueled lift trucks and tractors available in 1/8", 1/4" and 3/8" body sizes
- Heavy duty steel couplings for use in high impulse service available in most sizes
- Steam coupling available in 3/8" body size

Standard Materials

- Brass, zinc-plated steel, stainless steel and polypropylene (1/4" only) construction
- Stainless steel springs, balls and retaining rings
- Buna-N (Nitrile) seals
- Teflon back-up rings in 1-HK through 8-HKP steel and stainless steel sockets

Options

- Non-valved socket and plug
- Valve actuator in socket or plug
- Bleeder-style plug
- Sleeve lock
- Seals: Teflon, Neoprene, Viton, Buna-N, EPDM and Kalrez (See Elastomer Selection Guide, page 71)

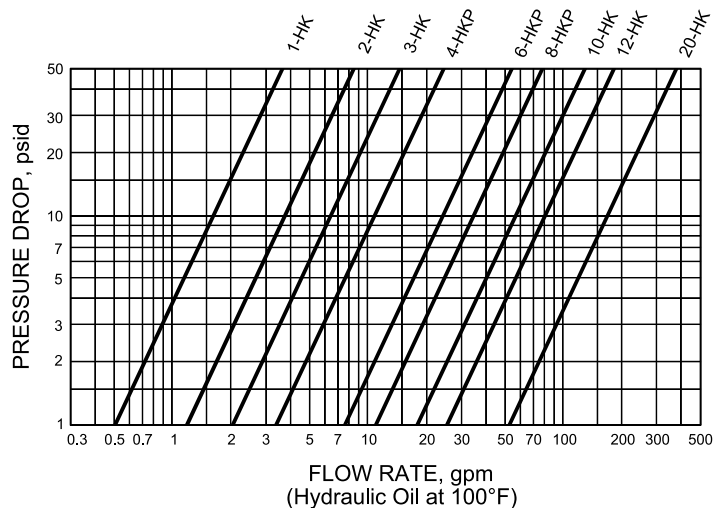
Accessories

- Dust caps and dust plugs (See page 68)
- Release clamp with chain

Rated Pressure and Flow Capacity

Series	Body Size	Brass		Steel		Stainless Steel	
		PSI	BAR	PSI	BAR	PSI	BAR
1-HK	1/8"	3,000	207	4,000	275	5,000	344
2-HK	1/4"	2,700	186	5,000	345	3,700	255
*P2-HK	1/4"	50	4	(+35°F to 150°F)			
3-HK	3/8"	2,200	152	3,700	255	3,700	255
4-HKP	1/2"	2,250	155	5,000	345	4,250	293
6-HKP	3/4"	2,000	138	4,000	275	3,500	242
8-HKP	1"	1,500	103	4,000	275	2,500	173
10-HK	1 1/4"	1,200	83	1,700	118	1,700	118
12-HK	1 1/2"	1,500	104	2,200	152	2,200	152
20-HK	2 3/4"	700	49	1,500	104	1,500	104

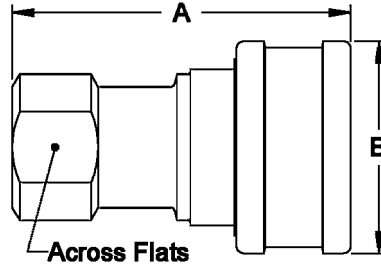
* Polypropylene Construction





Series 1-HK to 8-HK

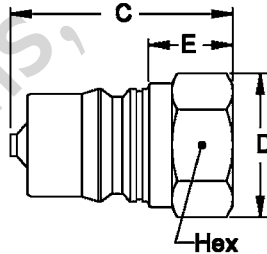
ISO 7241-1 Series B



SOCKETS

Body Size (inch)	Brass		Steel		Stainless Steel		Thread Size (female)			Dimensions (inches)		
	Standard	UL Listed	Standard	High Impulse	303	316	NPTF	BSPP	SAE	A	B	Across Flats
1/8	B1-H11	UL1-H11	1-H11	—	LL1-H11	ML1-H11	1/8-27	—	—	1.91	0.98	0.56
1/8	—	—	1-H4	—	LL1-H4	—	—	—	7/16-20	2.06	0.98	0.69
1/4	B2-H16	UL2-H16	2-H16	2-H16C	LL2-H16	ML2-H16	1/4-18	—	—	2.26	1.17	0.75
1/4	B2-H16BS	—	2-H16BS	—	LL2-H16BS	ML2-H16BS	—	1/4-19	—	2.26	1.17	0.75
1/4	—	—	2-H6	2-H6C	LL2-H6	—	—	—	9/16-18	2.40	1.17	0.88
3/8	B3-H21	UL3-H21	3-H21	3-H21C	LL3-H21	ML3-H21	3/8-18	—	—	2.56	1.42	0.88
3/8	B3-H21BS	—	3-H21BS	—	LL3-H21BS	ML3-H21BS	—	3/8-19	—	2.56	1.42	0.88
3/8	—	—	3-H8	3-H8C	LL3-H8	—	—	—	3/4-16	2.74	1.42	1.00
1/2	B4-HP26	—	4-HP26	4-HP26	LL4-HP26	ML4-HP26	1/2-14	—	—	2.96	1.86	1.13
1/2	B4-HP26BS	—	4-HP26BS	4-HP26BS	LL4-HP26BS	ML4-HP26BS	—	1/2-14	—	2.96	1.86	1.13
1/2	—	—	4-HP10	4-HP10	LL4-HP10	—	—	—	7/8-14	3.05	1.86	1.25
3/4	B6-HP31	—	6-HP31	6-HP31	LL6-HP31	ML6-HP31	3/4-14	—	—	3.48	2.22	1.31
3/4	B6-HP31BS	—	6-HP31BS	6-HP31BS	LL6-HP31BS	ML6-HP31BS	—	3/4-14	—	3.48	2.22	1.31
3/4	—	—	6-HP12	6-HP12	LL6-HP12	—	—	—	1 ¹ / ₁₆ -12	3.67	2.22	1.38
1	B8-HP36	—	8-HP36	8-HP36	LL8-HP36	ML8-HP36	1-11 ¹ / ₂	—	—	4.13	2.61	1.75
1	B8-HP36BS	—	8-HP36BS	8-HP36BS	LL8-HP36BS	ML8-HP36BS	—	1-11	—	4.13	2.61	1.75
1	—	—	8-HP16	8-HP16	LL8-HP16	—	—	—	1 ⁵ / ₁₆ -12	4.13	2.61	1.88

A = Overall Length B = Maximum Diameter



PLUGS

Body Size (inch)	Brass		Steel		Stainless Steel		Thread Size (female)			Dimensions (inches)			
	Standard	UL Listed	Standard	High Impulse	303	316	NPTF	BSPP	SAE	C	D	E	HEX
1/8	B1-K11	UL1-K11	1-K11	—	LL1-K11	ML1-K11	1/8-27	—	—	1.26	0.65	0.44	0.56
1/8	—	—	1-K4	—	LL1-K4	—	—	—	7/16-20	1.41	0.79	0.59	0.69
1/4	B2-K16	UL2-K16	2-K16	2-K16C	LL2-K16	ML2-K16	1/4-18	—	—	1.52	0.87	0.56	0.75
1/4	B2-K16BS	—	2-K16BS	—	LL2-K16BS	ML2-K16BS	—	1/4-19	—	1.52	0.87	0.56	0.75
1/4	—	—	2-K6	2-K6C	LL2-K6	—	—	—	9/16-18	1.66	1.01	0.70	0.88
3/8	B3-K21	UL3-K21	3-K21	3-K21C	LL3-K21	ML3-K21	3/8-18	—	—	1.76	1.01	0.61	0.88
3/8	B3-K21BS	—	3-K21BS	—	LL3-K21BS	ML3-K21BS	—	3/8-19	—	1.76	1.01	0.61	0.88
3/8	—	—	3-K8	3-K8C	LL3-K8	—	—	—	3/4-16	1.94	1.15	0.79	1.00
1/2	B4-KP26	—	4-KP26	4-KP26	LL4-KP26	ML4-KP26	1/2-14	—	—	2.03	1.30	0.76	1.13
1/2	B4-KP26BS	—	4-KP26BS	4-KP26BS	LL4-KP26BS	ML4-KP26BS	—	1/2-14	—	2.03	1.30	0.76	1.13
1/2	—	—	4-KP10	4-KP10	LL4-KP10	—	—	—	7/8-14	2.11	1.37	0.84	1.19
3/4	B6-KP31	—	6-KP31	6-KP31	LL6-KP31	ML6-KP31	3/4-14	—	—	2.36	1.52	0.71	1.31
3/4	B6-KP31BS	—	6-KP31BS	6-KP31BS	LL6-KP31BS	ML6-KP31BS	—	3/4-14	—	2.36	1.52	0.71	1.31
3/4	—	—	6-KP12	6-KP12	LL6-KP12	—	—	—	1 ¹ / ₁₆ -12	2.54	1.59	0.89	1.38
1	B8-KP36	—	8-KP36	8-KP36	LL8-KP36	ML8-KP36	1-11 ¹ / ₂	—	—	2.85	1.88	0.97	1.63
1	B8-KP36BS	—	8-KP36BS	8-KP36BS	LL8-KP36BS	ML8-KP36BS	—	1-11	—	2.85	1.88	0.97	1.63
1	—	—	8-KP16	8-KP16	LL8-KP16	—	—	—	1 ⁵ / ₁₆ -12	2.85	2.17	0.97	1.88

C = Overall Length D = Maximum Diameter E = Exposed Length when Connected

All dimensions in inches.

Series 1-HK to 8-HK

ISO 7241-1 Series B



Series P2-HK Plastic Coupling

The Series P2-HK coupling is intended for use with air, water and various chemicals at low pressure. It is designed for use where an economical, light weight, corrosion resistant coupling is desired. All components, except springs and seals, are molded from natural polypropylene with a UV inhibitor. Valve springs are 316 stainless steel. Viton seals are standard. EPDM (192) seals are optional.

Part No.	Thread Size NPTF	Dimensions			Hex	Part No.	Thread Size NPTF	Dimensions			Hex	
		A	B	HEX				C	D	E		HEX
PP2-H25F	1/4-18	2.38	1.45	0.88		PP2-K25F	1/4-18	1.65	1.01	0.67	0.88	

Series 3-HK Steam Coupling

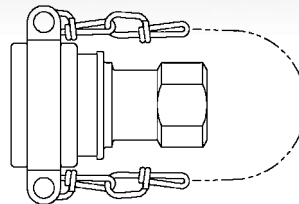
The Hansen Steam Coupling has a large diameter flange on the sleeve to aid gripping while the user wears heavy gloves. EPDM (192) seals are standard, and can be used with steam at temperatures up to 350°F. Options are BSPP threads, sleeve lock, EPDM (236) seals, for use with steam at temperatures above 350°F, and Viton (143) seals.

Part No.	Thread Size NPTF	Dimensions			Hex	Part No.	Thread Size NPTF	Dimensions			Hex	
		A	B	Across Flats				C	D	E		HEX
B3-H21Y	3/8-18	2.56	1.75	0.88		B3-K21-192	3/8-18	1.76	1.01	0.61	0.88	

Release Clamp with Chain

When fluid lines may be subjected to a damaging pull, couplings can be mounted to disconnect automatically, sealing both ends of a line against fluid loss. The socket sleeve can be anchored to a stationary bracket, either directly or with a chain. Excessive pull on the plug end of the line moves the socket body forward relative to the sleeve, and the plug is released without damage to the line. Release Clamp Assembly Kits are available for Series 1-HK through 8-HKP sockets.

Series	Kit Part No.
1-HK	1-HRC-K
2-HK	2-HRC-K
3-HK	3-HRC-K
4-HKP	4-HRC-K
6-HKP	6-HRC-K
8-HKP	8-HRC-K



Bleeder-Style Plugs

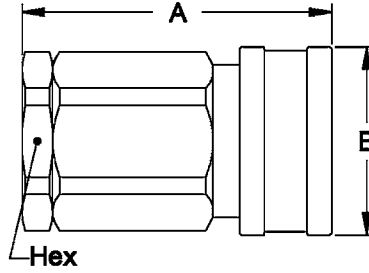
Bleeder-style plugs can be used on air lines to prevent hose whip when disconnecting a line by reducing the exhaust velocity of air. Bleeder-style plugs can be used on hydraulic lines to prevent static pressure from building up in disconnected lines. Valves of these plugs are manufactured such that a small leak path exists when the plug is disconnected. Bleeder-style plugs are available in Series 1-HK through 6-HKP.

Series	Plug Part No.
1-HK	B1-K11-VB
2-HK	B2-K16-VB
2-HK	2-K16C-VB
3-HK	B3-K21-VB
3-HK	3-K21-VB
3-HK	3-K21C-VB
4-HKP	4-KP26-VB
6-HKP	B6-KP31-VB
6-HKP	6-KP31-VB



Series 10-HK/12-HK/20-HK

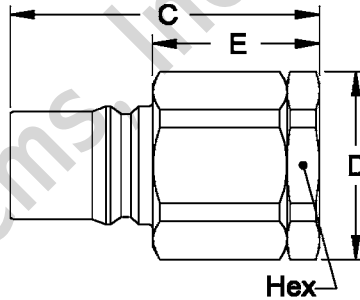
ISO 7241-1 Series B



SOCKETS

Body Size (inch)	Brass	Steel		303 Stainless Steel	Thread Size (female)		Dimensions (inches)		
		Standard	High Impulse		NPTF	BSPP	A	B	HEX
1 ¹ / ₄	B10-H41	10-H41	—	LL10-H41	1 ¹ / ₄ -11 ¹ / ₂	—	4.51	2.73	2.38
1 ¹ / ₄	—	10-H41BS	—	LL10-H41BS	—	1 ¹ / ₄ -11	4.51	2.73	2.38
1 ¹ / ₂	B12-H41	12-H41	12-H41C	LL12-H41	1 ¹ / ₄ -11 ¹ / ₂	—	4.82	3.23	2.38
1 ¹ / ₂	B12-H41BS	12-H41BS	—	LL12-H41BS	—	1 ¹ / ₄ -11	4.82	3.23	2.38
1 ¹ / ₂	B12-H46	12-H46	12-H46C	LL12-H46	1 ¹ / ₂ -11 ¹ / ₂	—	4.82	3.23	2.38
1 ¹ / ₂	B12-H46BS	12-H46BS	—	LL12-H46BS	—	1 ¹ / ₂ -11	4.82	3.23	2.38
2 ¹ / ₂	B20-H51	20-H51	20-H51C	LL20-H51	2-11 ¹ / ₂	—	5.55	4.11	3.75
2 ¹ / ₂	B20-H51BS	20-H51BS	—	LL20-H51BS	—	2-11	5.55	4.11	3.75
2 ¹ / ₂	B20-H56	20-H56	20-H56C	LL20-H56	2 ¹ / ₂ -8	—	6.14	4.11	3.75
2 ¹ / ₂	B20-H56BS	20-H56BS	—	LL20-H56BS	—	2 ¹ / ₂ -11	6.14	4.11	3.75
2 ¹ / ₂	B20-H61	20-H61	20-H61C	LL20-H61	3-8	—	7.00	4.11	4.00
2 ¹ / ₂	B20-H61BS	20-H61BS	—	LL20-H61BS	—	3-11	7.00	4.11	4.00

A = Overall Length B = Maximum Diameter



PLUGS

Body Size (inch)	Brass	Steel		303 Stainless Steel	Thread Size (female)		Dimensions (inches)			
		Standard	High Impulse		NPTF	BSPP	C	D	E	HEX
1 ¹ / ₄	B10-K41	10-K41	—	LL10-K41	1 ¹ / ₄ -11 ¹ / ₂	—	4.25	2.73	2.33	2.38
1 ¹ / ₄	—	10-K41BS	—	LL10-K41BS	—	1 ¹ / ₄ -11	4.25	2.73	2.33	2.38
1 ¹ / ₂	B12-K41	12-K41	12-K41C	LL12-K41	1 ¹ / ₄ -11 ¹ / ₂	—	4.76	3.02	2.67	2.38
1 ¹ / ₂	B12-K41BS	12-K41BS	—	LL12-K41BS	—	1 ¹ / ₄ -11	4.76	3.02	2.67	2.38
1 ¹ / ₂	B12-K46	12-K46	12-K46C	LL12-K46	1 ¹ / ₂ -11 ¹ / ₂	—	4.76	3.02	2.67	2.38
1 ¹ / ₂	B12-K46BS	12-K46BS	—	LL12-K46BS	—	1 ¹ / ₂ -11	4.76	3.02	2.67	2.38
2 ¹ / ₂	B20-K51	20-K51	20-K51C	LL20-K51	2-11 ¹ / ₂	—	5.49	4.31	2.97	3.75
2 ¹ / ₂	B20-K51BS	20-K51BS	—	LL20-K51BS	—	2-11	5.49	4.31	2.97	3.75
2 ¹ / ₂	B20-K56	20-K56	20-K56C	LL20-K56	2 ¹ / ₂ -8	—	6.08	4.31	3.56	3.75
2 ¹ / ₂	B20-K56BS	20-K56BS	—	LL20-K56BS	—	2 ¹ / ₂ -11	6.08	4.31	3.56	3.75
2 ¹ / ₂	B20-K61	20-K61	20-K61C	LL20-K61	3-8	—	6.94	4.31	4.42	4.00
2 ¹ / ₂	B20-K61BS	20-K61BS	—	LL20-K61BS	—	3-11	6.94	4.31	4.42	4.00

C = Overall Length D = Maximum Diameter E = Exposed Length when Connected

*ISO 7241-1 Series B does not include 1-1/4 inch body size couplings; therefore, Hansen Series 10-HK is not covered by this standard

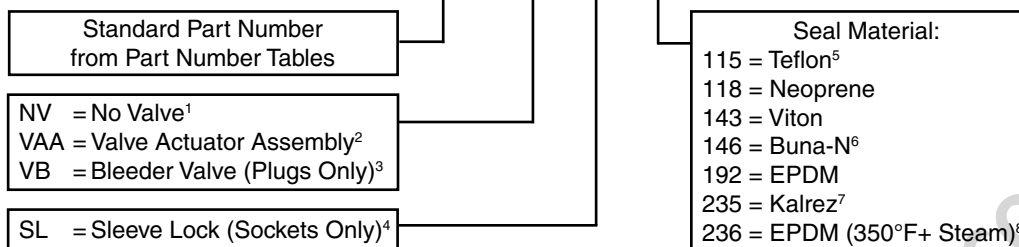
Series HK

Special Ordering Instructions



How to build a socket or plug part number with options:

Example: 4-HP26 - VAA - SL - 143



Notes:

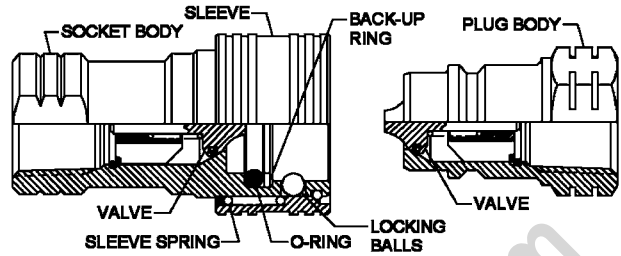
- 1) The NV option should be specified for a socket **and** a plug when a non-valved coupling is desired. Non-valved Series 1-HK through 8-HKP plugs do not contain seals. Do not specify a seal material.
- 2) The VAA option should be specified for a socket **or** a plug when a one-way coupling is desired.
- 3) The VB option can be ordered for Series 1-HK through 6-HKP plugs to prevent pressure build-up in disconnected hydraulic lines or to reduce hose whip when disconnecting pneumatic lines.
- 4) The Sleeve Lock device prevents accidental disconnection. Not available on sockets with prefix UL.
- 5) Series HK couplings are designed for use with elastomer seals. Teflon is not an elastomer. It is rigid and not resilient. Couplings with Teflon seals may leak and/or be difficult to connect. Force to connect may be reduced by heating connected couplings in hot water; then, cooling before disconnecting. Teflon seals are available for Series 1-HK through 8-HKP, except Series P2-HK.
- 6) The 146 seal option may be specified for fuels and hydraulic fluids that are known to cause standard Buna-N seals to swell excessively.
- 7) Couplings with Kalrez seals are available by special quotation.
- 8) The 236 seal option should be ordered for use with steam at or above 350°F. The 192 seal option should be ordered for hot water above 180°F and steam below 350°F.
- 9) Some part numbers may be subject to minimum order quantities.
- 10) Some options may be available only by special quotation. Consult your Hansen distributor.

TWO-WAY



Series HA 15000

ISO 7241-1 Series A



TWO-WAY

The Series HA 15000 is a general purpose hydraulic and fluid transfer coupling that conforms to the dimensional requirements of ISO 7241-1 Series A. Body sizes are 1/4", 3/8", 1/2", 3/4" and 1".

Features

- Ball lock
- Manual connect, disconnect
- Poppet valving
- Slim profile
- Zinc plated steel construction
- NPTF and BSPP end connections
- Available push-to-connect socket designed for bulkhead mounting (1/2" body size only)

Standard Materials

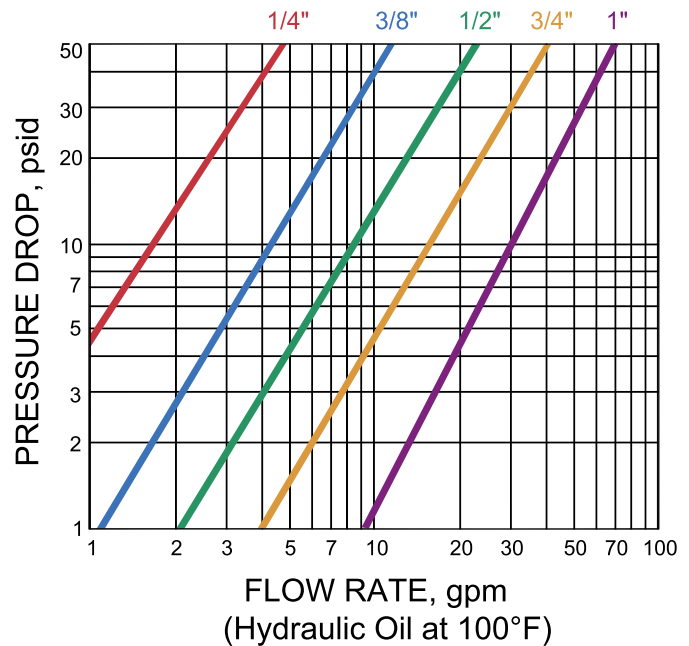
- Zinc-plated steel construction
- Stainless steel springs, balls and retaining rings
- Buna-N (Nitrile) seals

Accessories

- Dust caps and dust plugs (See page 69)

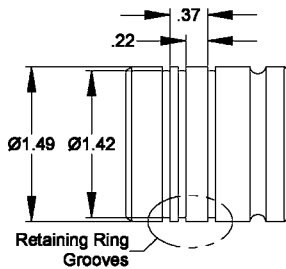
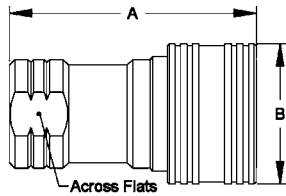
Rated Pressure

Body Size	PSI	BAR
1/4"	4,568	315
3/8"	4,568	315
1/2"	3,625	250
3/4"	3,625	250
1"	2,900	200



Series HA 15000

ISO 7241-1 Series A



SOCKETS

Body Size (inch)	Part Number (Steel)	Thread Size (female)		Dimensions (inches)		
		NPTF	BSPP	A	B	Across Flats
1/4	HA 15211 00	1/4-18	—	1.89	0.98	0.75
1/4	HA 15011 00	—	1/4-19	1.89	0.98	0.75
3/8	HA 15221 00	3/8-18	—	2.21	1.18	0.91
3/8	HA 15021 00	—	3/8-19	2.21	1.18	0.91
1/2	HA 15231 00	1/2-14	—	2.64	1.49	1.06
1/2	HA 15031 00	—	1/2-14	2.64	1.49	1.06
1/2	HA 15236 00*	1/2-14	—	2.64	1.49	1.06
1/2	HA 15036 00*	—	1/2-14	2.64	1.49	1.06
3/4	HA 15241 00	3/4-14	—	3.25	1.88	1.38
3/4	HA 15041 00	—	3/4-14	3.25	1.88	1.38
1	HA 15251 00	1-11 ¹ / ₂	—	3.86	2.08	1.62
1	HA 15051 00	—	1-11	3.86	2.08	1.62

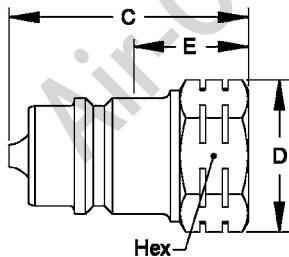
* Push-to-Connect Socket A = Overall Length B = Maximum Diameter

Push-to-Connect Socket - Part Nos. HA 15036 00 & HA 15236 00

This system allows automatic connection and disconnection simply by pushing the plug into or pulling it out of the socket body. Pulling on the hose moves the socket body forward relative to the bulkhead mounted double-acting sleeve, and the plug is released without damage to the hose.

Sleeve dimensions for bulkhead mounting are shown at left.

PLUGS



Body Size (inch)	Part Number (Steel)	Thread Size (female)		Dimensions (inches)			
		NPTF	BSPP	C	D	E	Hex
1/4	HA 15212 00	1/4-18	—	1.41	0.86	0.80	0.75
1/4	HA 15012 00	—	1/4-19	1.41	0.86	0.80	0.75
3/8	HA 15222 00	3/8-18	—	1.63	1.04	0.79	0.91
3/8	HA 15022 00	—	3/8-19	1.63	1.04	0.79	0.91
1/2	HA 15232 00	1/2-14	—	1.92	1.22	0.92	1.06
1/2	HA 15032 00	—	1/2-14	1.92	1.22	0.92	1.06
3/4	HA 15242 00	3/4-14	—	2.42	1.58	1.09	1.38
3/4	HA 15042 00	—	3/4-14	2.42	1.58	1.09	1.38
1	HA 15252 00	1-11 ¹ / ₂	—	2.83	1.85	1.19	1.62
1	HA 15052 00	—	1-11	2.83	1.85	1.19	1.62

C = Overall Length D = Maximum Diameter E = Exposed Length when Connected

TWO-WAY



Series FF

ISO 16028 Flat Face Hydraulic



TWO-WAY

The Series FF is a flat face dry break or minimum spill hydraulic coupling that meets or exceeds the ISO 16028 standard.

Body sizes: 1/4", 3/8", 1/2", 5/8", 3/4", and 1".

Applications

- FF series is ideal for applications where hydraulic spillage is a concern and interchangeability with other manufacturers is important.
 - Public Utilities
 - Construction Equipment
 - Agricultural Equipment
 - Mining Equipment
 - Railway Maintenance
 - Overhead bucket hoists
 - Skid steer loaders

Features

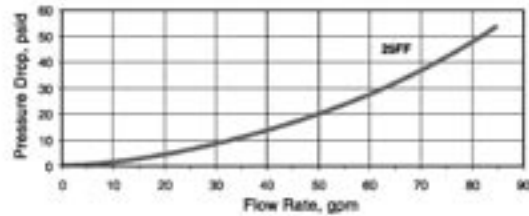
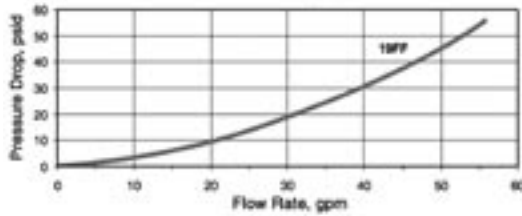
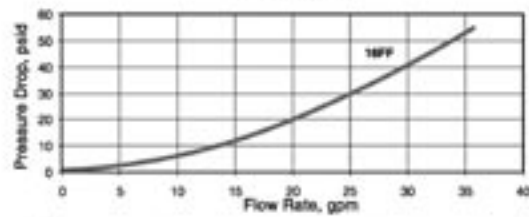
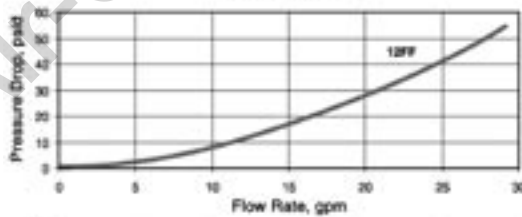
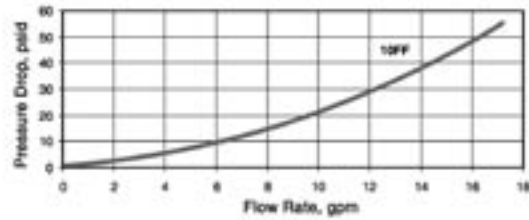
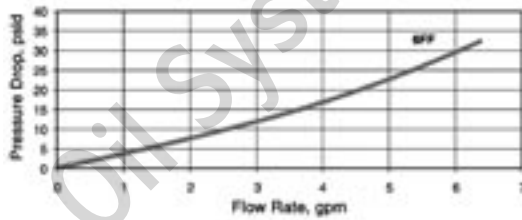
- Meets or exceeds ISO 16028 standard
- 5075 psi maximum operating pressure for all sizes (connected and disconnected)
- Push-to-connect
- Sleeve-locking device to prevent accidental disconnection is standard
- Excellent mechanical performance (pressure/flow)

Standard Materials

- Zinc plated steel with yellow chromate or QPQ finish
- Stainless steel springs and locking balls
- Buna-N (Nitrile) seals (-4° F to +212° F)

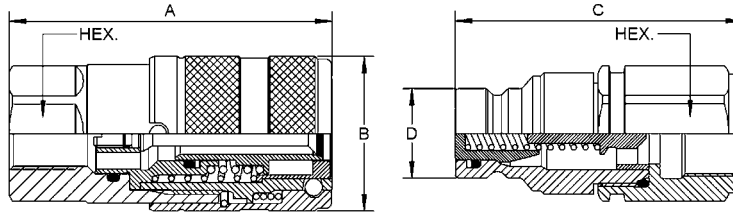
Accessories

- Dust caps and plugs
 - PVC (red)



Series FF

ISO 16028 Flat Face Hydraulic



Part Numbers	Body Size (inch)	Thread Size	Dimensions (inches)						Rated Pressure, psi (bar)			Dust Plugs/ Caps				
			Socket			Plug			Coupling Connected Length	Socket	Plug		Connected			
			Overall Length A	Max. Dia. B	Hex Size	Overall Length C	Dia. D	Hex Size								
6FFS25	1/4	1/4" NPT	2.32	1.10	0.87	-	-	-	3.94	5075 (350)	5075 (350)	5075 (350)	SDC6FF			
6FFP25			-	-	-	2.05	0.63	0.87					PDC6FF			
10FFS37	3/8	3/8" NPT	2.87	1.26	1.18	-	-	-	4.76	5075 (350)	5075 (350)	5075 (350)	SDC10FF			
10FFP37			-	-	-	2.52	0.78	1.18					PDC10FF			
10FFS50		1/2" NPT	2.87	1.26	1.18	-	-	-	4.76				5075 (350)	5075 (350)	5075 (350)	SDC10FF
10FFP50			-	-	-	2.52	0.78	1.18								PDC10FF
12FFS50	1/2	1/2" NPT	3.31	1.50	1.42	-	-	-	5.55	5075 (350)	5075 (350)	5075 (350)	SDC12FF			
12FFP50			-	-	-	2.91	0.96	1.42					PDC12FF			
12FFS106UN		1-1/16" UNF	3.43	1.59	1.42	-	-	-	5.67				5075 (350)	5075 (350)	5075 (350)	SDC12FF
12FFP106UN			-	-	-	2.92	0.96	1.42								PDC12FF
12FFS75		3/4" NPT	3.31	1.50	1.42	-	-	-	5.59				5075 (350)	5075 (350)	5075 (350)	SDC12FF
12FFP75			-	-	-	2.95	0.96	1.42								PDC12FF
16FFS50	5/8	1/2" NPT	3.23	1.65	1.42	-	-	-	5.39	5075 (350)	5075 (350)	5075 (350)	-			
16FFP50			-	-	-	2.87	1.06	1.42					-			
16FFS75		3/4" NPT	3.39	1.65	1.42	-	-	-	5.63				5075 (350)	5075 (350)	5075 (350)	-
16FFP75			-	-	-	2.95	1.06	1.42								-
19FFS75	3/4	3/4" NPT	3.74	1.89	1.61	-	-	-	6.26	5075 (350)	5075 (350)	5075 (350)	SDC19FF			
19FFP75			-	-	-	3.39	1.18	1.61					PDC19FF			
19FFS131UN		1-5/16" UNF	3.74	1.89	1.61	-	-	-	6.26				5075 (350)	5075 (350)	5075 (350)	SDC19FF
19FFP131UN			-	-	-	2.39	1.18	1.61								PDC19FF
19FFS100		1" NPT	3.86	1.89	1.61	-	-	-	6.38				5075 (350)	5075 (350)	5075 (350)	SDC19FF
19FFP100			-	-	-	3.39	1.18	1.61								PDC19FF
25FFS125	1.0	1-1/4" NPT	4.33	2.17	2.17	-	-	-	6.97	5075 (350)	5075 (350)	5075 (350)	-			
25FFP125			-	-	-	3.54	1.42	2.17					-			

TWO-WAY

Air-Oil Systems



Series 96 Wing Nut



TWO-WAY

The Series 96 coupling is a heavy-duty wing nut coupling designed for use in hydraulic lines where dry break and minimum air inclusion are required. It is ideal for hydraulic dump trucks, oil field equipment, spreading equipment and applications requiring the ability to connect and/or disconnect under pressure. Body sizes are 3/4", 1" and 1 1/4".

Features

- Non-spill double shut-off with minimum air inclusion
- Connect/disconnect under pressure
- Corrosion resistant brass body
- Plugs can be bulkhead mounted
- Interchanges with other manufacturers' couplings

Standard Materials

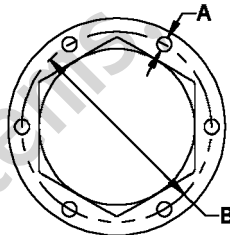
- Brass body (socket & plug)
- Zinc plated steel wing nut (socket)
- Stainless steel springs
- Buna-N (Nitrile) seals

Options

- Dust caps and dust plugs (See page 69)
- Bulkhead mounting flanges

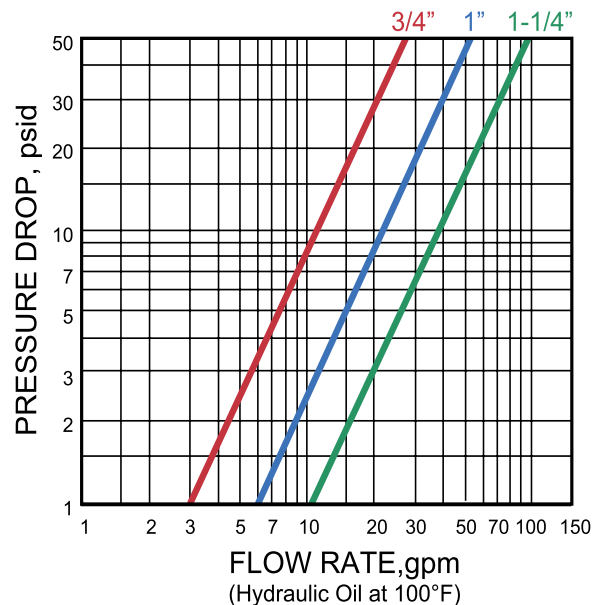
Bulkhead Mounting Flanges

Body Size (inches)	Part No.	Diameters (inches)	
		Bolt Hole A	Bolt Circle B
3/4"	FL96-075	0.201	2.13
1"	FL96-100	0.201	2.38
1 1/4"	FL96-125	0.201	2.63



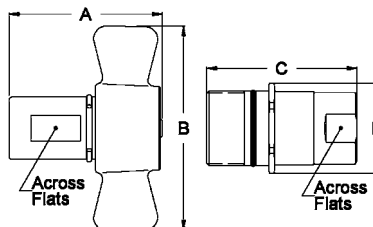
Rated Pressure

Body Series	PSI	BAR
3/4"	3,000	207
1"	3,000	207
1 1/4"	2,750	190



Sockets

Body Size	Part No.	Thread Size NPTF	Dimensions		
			A	B	Across Flats
3/4"	96-S31	3/4-14	3.09	4.06	1.15
1"	96-S36	1-11 1/2	3.78	4.45	1.44
1 1/4"	96-S41	1 1/4-11 1/2	3.97	5.20	1.78

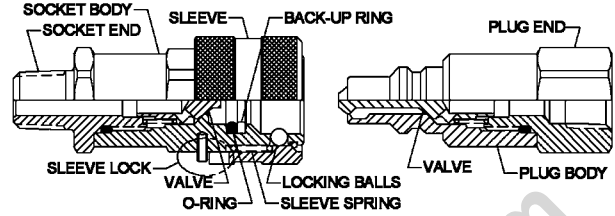
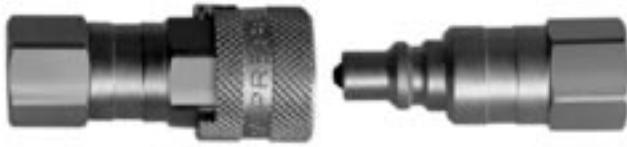


Plugs

Body Size	Part No.	Thread Size NPTF	Dimensions		
			C	D	Across Flats
3/4"	96-P31	3/4-14	3.10	1.78	1.31
1"	96-P36	1-11 1/2	3.55	2.00	1.56
1 1/4"	96-P41	1 1/4-11 1/2	3.71	2.38	1.88

Series UP10 "Ultra Pressure"

10,000 psi



The Series UP10 is a high pressure hydraulic quick connect coupling designed to operate at pressures up to 10,000 psi. Its ball lock mechanism makes it a true quick connect coupling, as opposed to thread-to-connect couplings that are typically used in high pressure hydraulics. Body size is 1/4".

Features

- Ball lock
- Slim profile compared to threaded couplings
- High strength steel construction
- Poppet valves with metal-to-metal sealing
- 1/4" & 3/8" male & female NPTF end connections
- Standard sleeve lock

Standard Materials

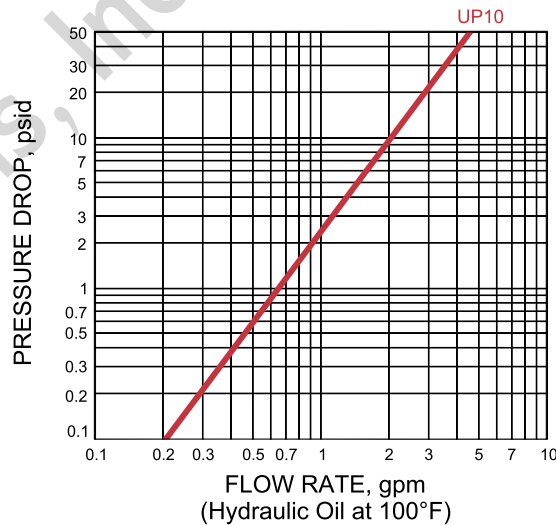
- High strength steel bodies and valves
- Stainless steel springs & balls
- Buna-N (Nitrile) seals
- Teflon back-up ring (socket)

Accessories

- Dust caps and dust plugs (See page 68)

Rated Pressure

Series	PSI	BAR
UP	10,000	700

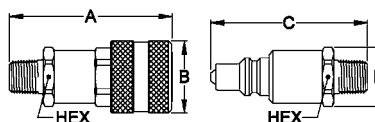


Sockets

Plugs

Part No.	Thread Size	Dimensions		
		A	B	HEX
UP10S-25M	1/4-18 NPTF	2.69	1.18	0.88
UP10S-37M	3/8-18 NPTF	2.69	1.18	0.88

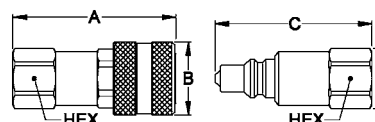
Male End Connections



Part No.	Thread Size	Dimensions		
		C	D	HEX
UP10P-25M	1/4-18 NPTF	2.59	0.97	0.88
UP10P-37M	3/8-18 NPTF	2.59	0.97	0.88

Female End Connections

Part No.	Thread Size	Dimensions		
		A	B	HEX
UP10S-25F	1/4-18 NPTF	2.64	1.18	0.88
UP10S-37F	3/8-18 NPTF	2.69	1.18	0.88



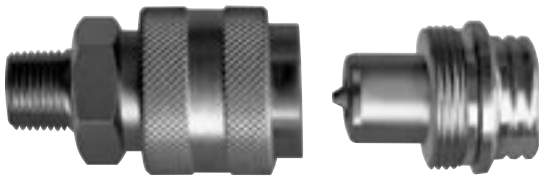
Part No.	Thread Size	Dimensions		
		C	D	HEX
UP10P-25F	1/4-18 NPTF	2.54	0.97	0.88
UP10P-37F	3/8-18 NPTF	2.59	0.97	0.88



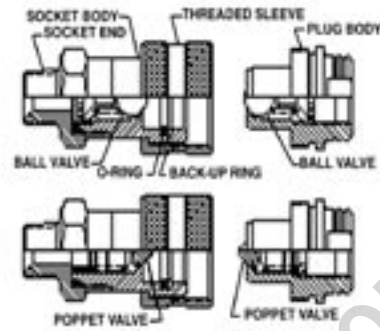
Series WA 56000 / HP3

Thread-to-Connect 10,000 psi

WA 56000



HP3



TWO-WAY

Series WA 56000 and HP3 are high pressure hydraulic screw together couplings designed to operate at pressures up to 10,000 psi. Their rugged design make them suitable for use in hydraulic ram, pump and high impulse applications. Body sizes are 1/4" and 3/8".

Features

- Threaded latching
- Rugged steel construction
- Poppet valves with elastomer seal standard in 1/4" coupling
- Poppet valves and ball valves available in 3/8" coupling
- Body size matches thread size. 1/4" and 3/8" body sizes do not interchange.

Standard Materials

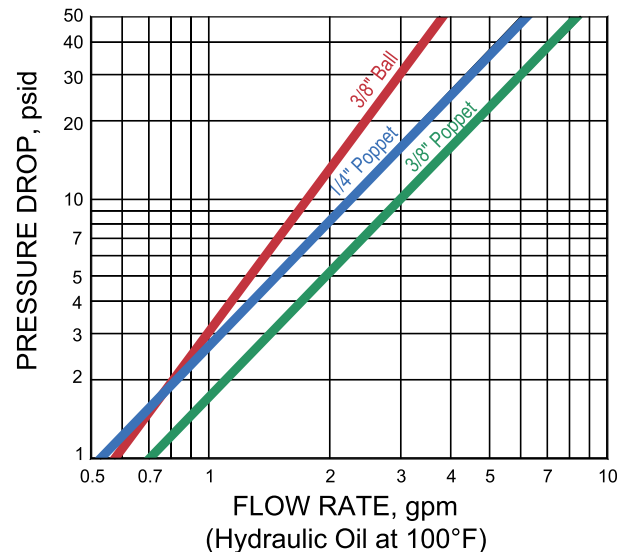
- Zinc plated steel construction
- High strength steel ball valves
- Stainless steel springs
- Buna-N (Nitrile) seals
- Teflon back-up ring (socket)

Accessories

- Dust caps and dust plugs (See page 69)

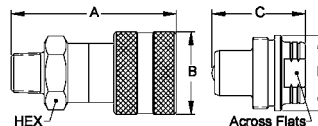
Rated Pressure

Body Size	PSI	BAR
1/4"	10,000	700
3/8"	10,000	700



Sockets – Male End Connections

Part No.	Valve Type	Thread Size NPTF	Dimensions		
			A	B	HEX
WA 56517 00	Poppet	1/4-18	2.36	1.12	0.88
WA 56527 00	Poppet	3/8-18	2.76	1.38	1.06
HP3SB37M	Ball	3/8-18	2.76	1.38	1.06

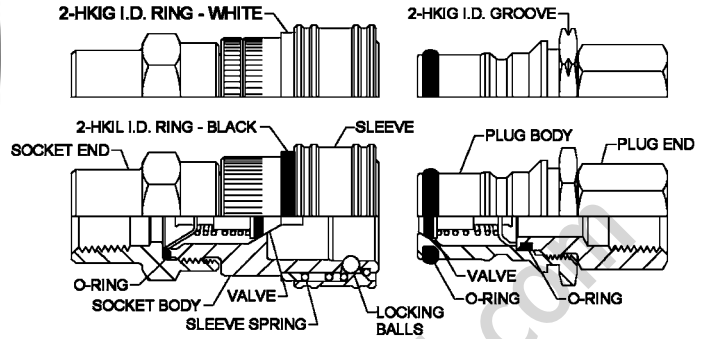


Plugs – Female End Connections

Part No.	Valve Type	Thread Size NPTF	Dimensions		
			C	D	Across Flats
WA 56514 00	Poppet	1/4-18	1.26	1.10	0.75
WA 56524 00	Poppet	3/8-18	1.52	1.26	0.91
HP3PB37F	Ball	3/8-18	1.52	1.26	0.91

Series 2-HKIG & 2-HKIL

1/4" Nominal



TWO-WAY

Series 2-HKIG and 2-HKIL Stainless Steel Couplings can be used with various liquids and gases. They are functionally identical, but do not interchange. They can be used where it is necessary to avoid crossing lines.

Features

- Ball lock
- Manual operation
- Noninterchangeable designs
- 1/4" body size
- All-stainless steel construction
- Sockets available with right-angle connection

Standard Materials

- Stainless steel bodies, valves and sleeves

- Stainless steel springs, balls and retaining rings
- Buna-N (Nitrile) seals
- Socket identification ring
 - 2-HKIG: White acetal
 - 2-HKIL: Black acetal

Options

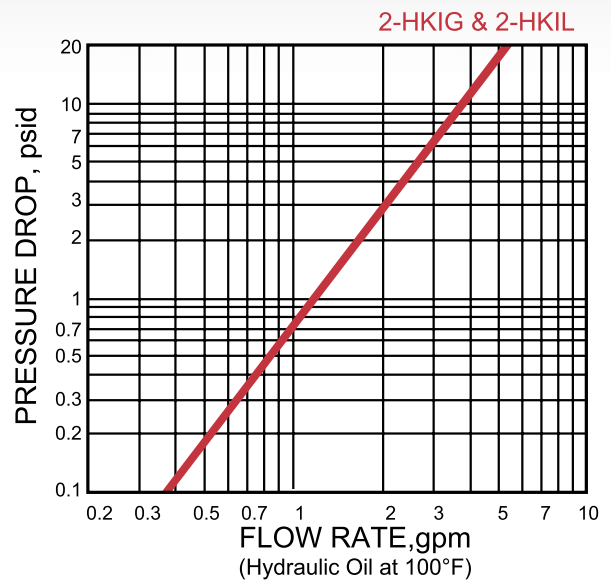
- Seals: Teflon, Viton, EPDM

Accessories

- Dust caps
(See page 68)

Rated Pressure

Series	PSI	BAR
2-HKIG & 2-HKIL	1500	103





Series 2-HKIG & 2-HKIL

1/4" Nominal

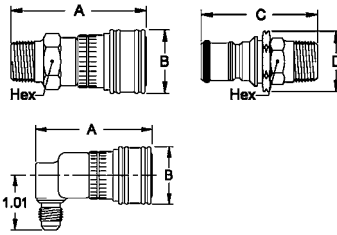
SOCKETS

2-HKIG

PLUGS

Part No.	Thread	Dimensions		
	Size	A	B	HEX
2-HIG10	1/8-27 NPTF	2.18	1.06	0.81
2-HIG15	1/4-18 NPTF	2.31	1.06	0.81
2-HIG20	3/8-18 NPTF	2.31	1.06	0.81
2-HIG720	7/16-20*	2.27	1.06	0.81
2-HIG-LLRA720†	7/16-20*	2.09	1.06	—

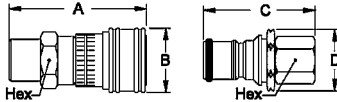
Male End Connections



Part No.	Thread	Dimensions		
	Size	C	D	HEX
2-KIG-F15	1/4-18 NPTF	1.98	1.01	0.69
2-KIG-F20	3/8-18 NPTF	1.98	1.01	0.69

Part No.	Thread	Dimensions		
	Size	A	B	HEX
2-HIG11	1/8-27 NPTF	2.18	1.06	0.81
2-HIG16	1/4-18 NPTF	2.26	1.06	0.81

Female End Connections



Part No.	Thread	Dimensions		
	Size	C	D	HEX
2-KIG-F16	1/4-18 NPTF	1.84	1.01	0.69
2-KIG-F720	7/16-20*	1.61	1.01	0.69
2-KIG-F	9/16-18	1.17	1.01	0.88

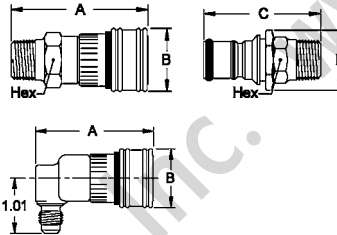
SOCKETS

2-HKIL

PLUGS

Part No.	Thread	Dimensions		
	Size	A	B	HEX
2-HIL10	1/8-27 NPTF	2.18	1.06	0.81
2-HIL15	1/4-18 NPTF	2.31	1.06	0.81
2-HIL20	3/8-18 NPTF	2.31	1.06	0.81
2-HIL720	7/16-20*	2.27	1.06	0.81
2-HIL-LLRA720†	7/16-20*	2.09	1.06	—

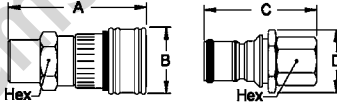
Male End Connections



Part No.	Thread	Dimensions		
	Size	C	D	HEX
2-KIL-F15	1/4-18 NPTF	1.98	1.01	0.69
2-KIL-F20	3/8-18 NPTF	1.98	1.01	0.69

Part No.	Thread	Dimensions		
	Size	A	B	HEX
2-HIL11	1/8-27 NPTF	2.18	1.06	0.81
2-HIL16	1/4-18 NPTF	2.26	1.06	0.81

Female End Connections



Part No.	Hose	Dimensions		
	Size	C	D	HEX
2-KIL-F16	1/4-18 NPTF	1.84	1.01	0.69
2-KIL-F720	7/16-20*	1.61	1.01	0.69
2-KIL-F	5/8-18	1.17	1.01	0.88

* 1/4" SAE Flare † Right-Angle End Connection

How to build a socket or plug part number with options:

- Notes:
- 1) Some part numbers may be subject to minimum order quantities.
 - 2) Options not shown may be available by special quotation. Consult your Hansen distributor.

Example: 2-HIG15 - 143

Standard Part Number
from Tables Above

Seal Material:
115 = Teflon
143 = Viton
192 = EPDM

Series DB

316 Stainless Steel Flat Face



The Series DB is designed for fluid handling where minimum spillage and minimum air inclusion are required. Couplings in this series are constructed of 316L stainless steel, which makes them suitable for use in chemical, pharmaceutical and food processing industries. Body sizes are 1/4", 3/8", 1/2", 3/4" and 1".

Features

- Ball lock
- Push-to-connect
- Minimal fluid loss when disconnecting
- Minimal air inclusion when connecting
- High flow capacity
- NPTF and BSPP threads available.

Standard Materials

- 316L stainless steel construction
- Viton seals

Options

- Various seal materials available.

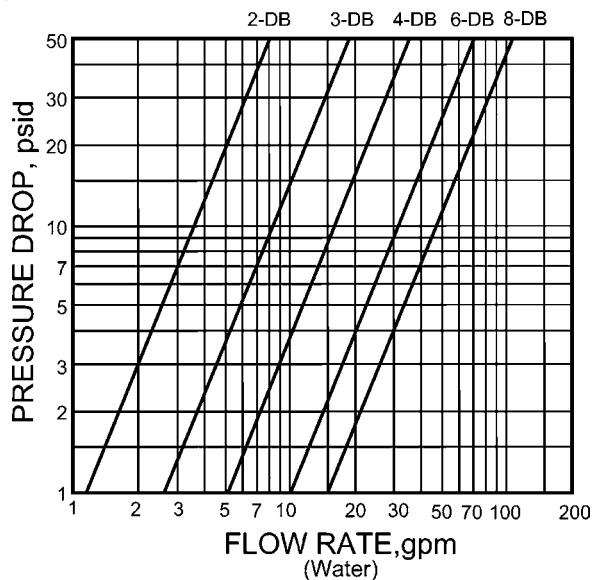
TWO-WAY

Rated Pressure

Body Size	Socket		Plug		Connected	
	PSI	BAR	PSI	BAR	PSI	BAR
1/4"-1"	1,450	100	2,030	140	2,030	140

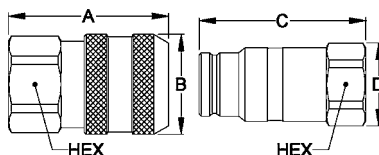
Spillage & Air Inclusion

Body Size	Spillage Max. per Disconnect	Air Inclusion Max. per Connect
1/4"	.01 ml	.01 ml
3/8"	.02 ml	.02 ml
1/2"	.02 ml	.02 ml
3/4"	.02 ml	.03 ml
1"	.04 ml	.13 ml



Sockets

Body Size (inch)	Part No.	Thread Size (Female)	Dimensions		
			A	B	HEX
1/4	2DBS-25F	1/4-18 NPTF	1.98	1.02	0.88
1/4	2DBS-25FBS	1/4-19 BSPP	1.98	1.02	0.88
3/8	3DBS-37F	3/8-18 NPTF	2.36	1.27	1.00
3/8	3DBS-37FBS	3/8-19 BSPP	2.36	1.27	1.00
1/2	4DBS-50F	1/2-14 NPTF	2.52	1.59	1.38
1/2	4DBS-50FBS	1/2-14 BSPP	2.52	1.59	1.38
3/4	6DBS-75F	3/4-14 NPTF	3.71	2.00	1.50
3/4	6DBS-75FBS	3/4-14 BSPP	3.71	2.00	1.50
1	8DBS-100F	1-11 1/2 NPTF	3.52	2.25	1.81
1	8DBS-100FBS	1-11 BSPP	3.52	2.25	1.81



Plugs

Body Size (inch)	Part No.	Thread Size (Female)	Dimensions		
			C	D	HEX
1/4	2DBP-25F	1/4-18 NPTF	1.65	0.94	0.81
1/4	2DBP-25FBS	1/4-19 BSPP	1.65	0.94	0.81
3/8	3DBP-37F	3/8-18 NPTF	2.34	1.08	0.94
3/8	3DBP-37FBS	3/8-19 BSPP	2.34	1.08	0.94
1/2	4DBP-50F	1/2-14 NPTF	2.63	1.37	1.18
1/2	4DBP-50FBS	1/2-14 BSPP	2.63	1.37	1.18
3/4	6DBP-75F	3/4-14 NPTF	3.68	1.88	1.63
3/4	6DBP-75FBS	3/4-14 BSPP	3.68	1.88	1.63
1	8DBP-100F	1-11 1/2 NPTF	3.52	2.08	1.81
1	8DBP-100FBS	1-11 BSPP	3.52	2.08	1.81

All dimensions in inches.



Series WA 10000

Refrigerant and Fluid Transfer



TWO-WAY

The Series WA 10000 is a thread together, minimum spill/inclusion coupling designed for refrigeration, air conditioning, gas and liquid transfer applications.

Features

- Dry break design minimizes fluid loss and air inclusion
- Threaded connection permits connecting and disconnecting under pressure
- Brazed or threaded end connections available
- Male half can be bulkhead mounted
- Interchanges with refrigerant couplings existing on the market

Standard Materials

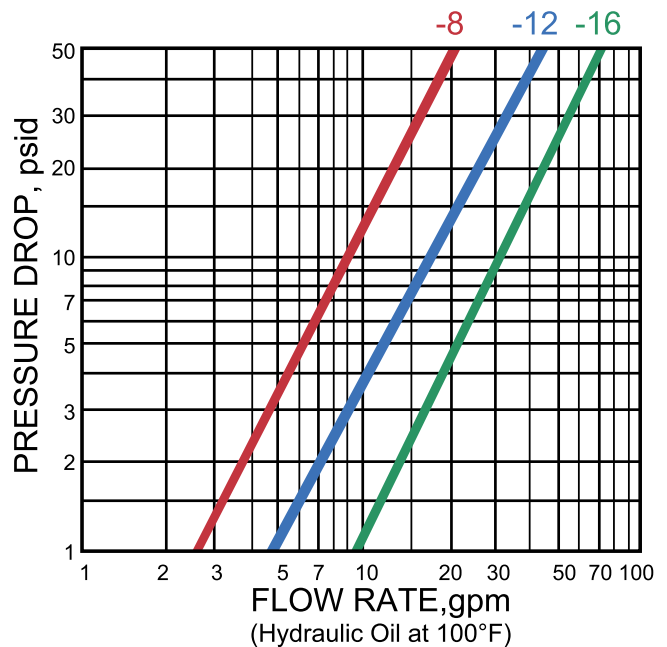
- Zinc plated steel construction
- HNBR and Neoprene seals

Accessories

- SAE 37° (JIC) adapters (steel)
- Braze adapters (brass)
- O-rings for adapters
- Dust caps and dust plugs

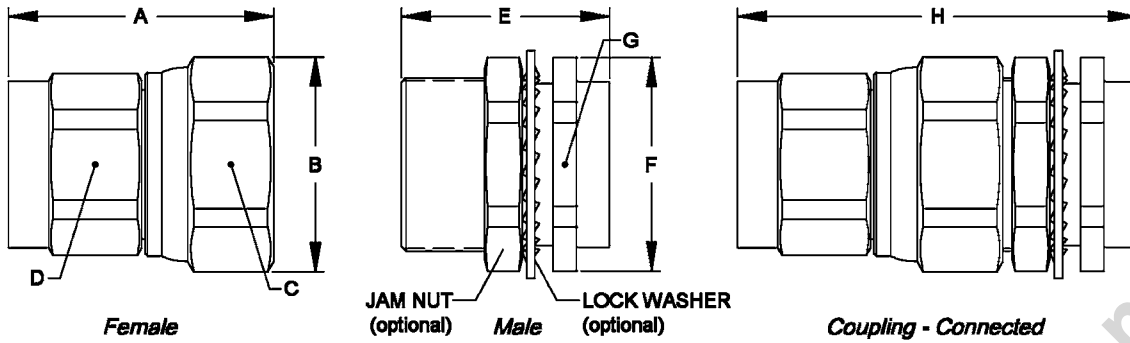
Rated Pressure

Dash Size	Female Half		Male Half		Connected	
	PSI	BAR	PSI	BAR	PSI	BAR
-8	435	30	1,160	80	1,810	125
-12	435	30	1,015	70	1,015	70
-16	360	25	725	50	725	50



Series WA 10000

Refrigerant and Fluid Transfer



Coupling Dash Size	Seal Material	Dimensions (inches)										
		Female Half					Male Half					* Connected Length (no adapter) H
		Part No.	Overall Length A	Max. Dia. B	Hex Size C	Hex Size D	Part No.	Overall Length E	Max. Dia. F	Hex Size G		
-8	HNBR	WA 10037 IO	1.66	1.30	1.18	1.02	WA 10034 IO	1.38	1.26	1.15	2.67	
-8	Neoprene	WA 10037 MO	1.66	1.30	1.18	1.02	WA 10034 MO	1.38	1.26	1.15	2.67	
-12	HNBR	WA 10057 IO	2.17	1.77	1.62	1.38	WA 10054 IO	1.73	1.77	1.62	3.33	
-12	Neoprene	WA 10057 MO	2.17	1.77	1.62	1.38	WA 10054 MO	1.73	1.77	1.62	3.33	
-16	HNBR	WA 10067 IO	2.40	2.21	1.97	1.77	WA 10064 IO	1.98	2.09	1.89	3.75	
-16	Neoprene	WA 10067 MO	2.40	2.21	1.97	1.77	WA 10064 MO	1.98	2.09	1.89	3.75	

* To calculate the overall length of a connected coupling with adapters installed, add the exposed lengths of two adapters to the connected length with no adapter (Connected Length with Adapters = H + 2 x K).

Coupling Dash Size	Maximum Bulkhead Thickness (inches)		Assembly Torque, lb-ft	
	With Lock Washer	Without Lock Washer	Adapter/Body	Male/Female
			-8	0.16
-12	0.23	0.34	40-45	20-25
-16	0.22	0.28	50-55	25-30

TWO-WAY

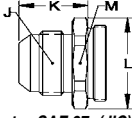
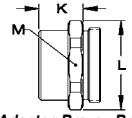
Air-Oil Systems

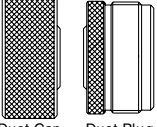
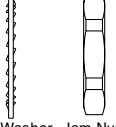


Series WA 10000

Refrigerant and Fluid Transfer

Accessories

Adapters	Coupling Dash Size	Tube O.D. (inch)	Part Numbers			Dimensions (inches)			
			Adapter	O-Ring		Thread Size J	Exposed Length K	Max. Dia. L	Hex Size M
				HNBR	Neoprene				
 Adapter, SAE 37 (JIC) - Steel	-8	3/8	W54A32N	W11J340	W11M340	9/16-18	0.81	1.10	1.00
	-8	1/2	W54A33N	W11J340	W11M340	3/4-16	0.91	1.10	1.00
	-12	5/8	W54A52N	W11J54041	W11M540	7/8-14	1.07	1.52	1.38
	-12	3/4	W54A53N	W11J54041	W11M540	1 ¹ / ₁₆ -12	1.24	1.52	1.38
	-16	1	W54A62N	W11J64041	W11M640	1 ⁵ / ₁₆ -12	1.27	1.97	1.75
 Adapter, Braze - Brass	-8	3/8	W60L38038	W11J340	W11M340	-	0.47	1.12	1.00
	-8	1/2	W60L38012	W11J340	W11M340	-	0.37	1.12	1.00
	-12	5/8	W60L58058	W11J54041	W11M540	-	0.72	1.54	1.38
	-16	7/8	W60L68078	W11J64041	W11M640	-	0.99	1.96	1.75

 Dust Cap Dust Plug	Coupling Dash Size	Part Numbers				 Lock Washer Jam Nut
		Dust Cap	Dust Plug	Lock Washer	Jam Nut	
	-8	WA 10134 00	WA 10137 00	W62A34N	W28A34N	
	-12	WA 10154 00	WA 10157 00	W62A54N	W28A54N	
	-16	WA 10164 00	WA 10167 00	W62A64N	W28A64N	

TWO-WAY

Air-Oil Systems, Inc.

STRAIGHT-THROUGH COUPLINGS





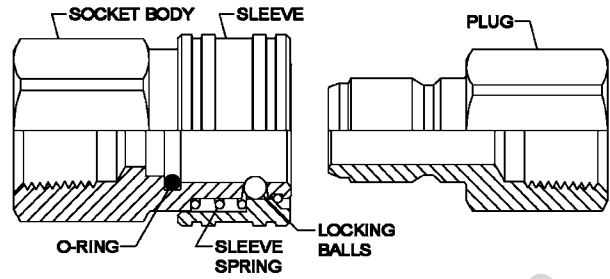
Contents and Selector Chart

STRAIGHT-THROUGH

Coupling Series	Page	Body Size										Body Material				Locking Mechanism		Options		
		1/8 INCH	1/4 INCH	3/8 INCH	1/2 INCH	3/4 INCH	1 INCH	1 1/4 INCH	1 1/2 INCH	2 INCH	2 1/2 INCH	BRASS	STEEL (Plugs Only)	STAINLESS STEEL (303)	PLASTIC (Polypropylene)	BALL LOCK	PLASTIC FINGERS	SLEEVE LOCK	SEAL MATERIALS (Various)	DUST CAP/PLUG (Vinyl)
1-ST	54	●									●	●	●		●		●	●		
2-ST	54		●								●	●	●		●		●	●	★	
3-ST	54			●							●	●	●		●		●	●	★	
4-ST	54				●						●	●	●		●		●	●		
6-ST	54					●					●	●	●		●		●	●	▼	
8-ST	54						●				●	●	●		●		●	●	◇	
10-ST	54							●			●	●	●		●		●	●	◇	
12-ST	54								●		●	●	●		●		●	●		
16-ST	54									●	●	●	●		●		●	●		
20-ST	54										●	●	●		●		●	●		
P2-ST	56		●										●		●					
P3-ST	56			●									●		●					
GH	56					●					●				●					
Flo-Temp	57	●	●	●							●	●			●					

- ★ Socket dust plug only
- ▼ Socket dust plug and plug dust cap
- ◇ Plug dust cap only

Series ST Straight-Through



Series ST straight-through couplings are designed for use where minimum pressure drop is required and valving is not needed. They are well suited for use on pressure wash, steam cleaning and carpet cleaning equipment, and many fluid transfer systems. Body sizes range from 1/8" to 2-1/2".

Features

- Ball lock
- Manual operation
- Smooth bore permits free flow of liquid or gas.
- Male and female NPTF, BSPP and hose stem connections

Standard Materials

- Brass or 303 stainless steel socket construction
- Stainless steel springs, balls and retaining rings
- Brass, zinc plated steel and 303 stainless steel plugs
- High impulse heat treated 416 stainless steel plugs available in 1/4" and 3/8" body sizes
- Buna-N (Nitrile) seals

Options

- Sleeve lock
- Seals: Teflon (1-ST through 8-ST), Neoprene, Viton, Buna-N and EPDM (See Elastomer Selection Guide, page 71)

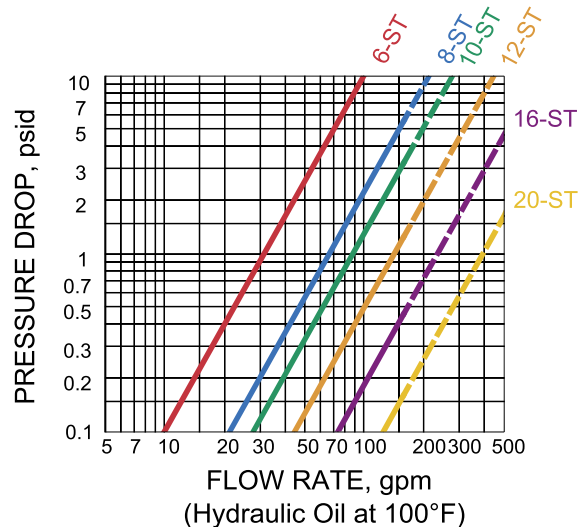
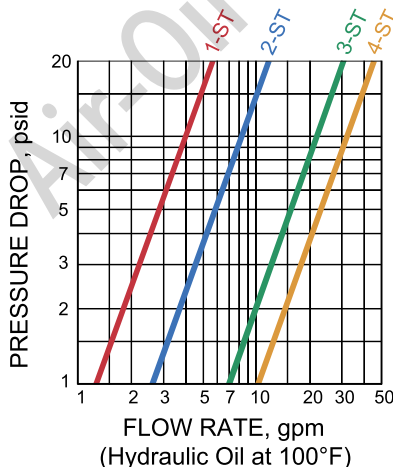
Accessories

- Dust caps and dust plugs for a limited number of sizes (See page 68)

*Rated Pressure

Series	Body Size	Brass Socket Brass Plug		Brass Socket Steel Plug		Stainless Steel Socket & Plug	
		PSI	BAR	PSI	BAR	PSI	BAR
1-ST	1/8"	2,800	193	3,400	234	4,200	290
2-ST	1/4"	5,200	359	5,500	379	7,500	517
3-ST	3/8"	2,800	193	4,200	290	6,300	434
4-ST	1/2"	2,200	152	3,500	241	3,600	248
6-ST	3/4"	1,700	117	2,100	145	3,000	207
8-ST	1"	1,300	90	2,000	138	2,000	138
10-ST	1 1/4"	1,700	117	2,700	186	2,200	152
12-ST	1 1/2"	1,400	97	2,200	152	2,500	172
16-ST	2"	1,400	97	2,200	152	1,500	103
20-ST	2 1/2"	900	62	1,500	103	-	-

*Pressure ratings are for sockets and plugs with threaded end connections. Pressure ratings of couplings with hose stems may be significantly lower, and will depend on the type of hose and the method of clamping. Refer to hose manufacturer's end connection pressure ratings. The best way to determine suitability for an application is to run pressure testing under controlled conditions.



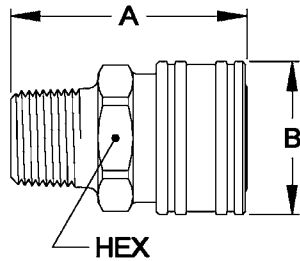
STRAIGHT-THROUGH



Series ST Straight-Through

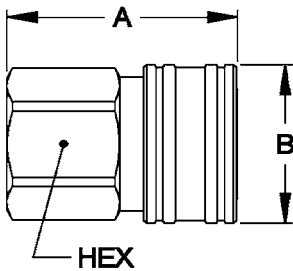
Sockets

Male End Connections



Body Size	Part Number		Thread Size		Dimensions		
	Brass	Stainless	NPTF	BSPF	A	B	Hex
1/8	1-S10	LL1-S10	1/8-27	—	1.06	0.69	0.50
1/8	1-S10BS	LL1-S10BS	—	1/8-28	1.00	0.69	0.56
1/4	2-S15	LL2-S15	1/4-18	—	1.72	0.94	0.81
1/4	2-S15BS	LL2-S15BS	—	1/4-19	1.56	0.94	0.81
3/8	3-S20	LL3-S20	3/8-18	—	1.75	1.13	1.00
3/8	3-S20BS	LL3-S20BS	—	3/8-19	1.62	1.13	1.00
1/2	4-S25	LL4-S25	1/2-14	—	2.03	1.31	1.13
1/2	4-S25BS	LL4-S25BS	—	1/2-14	1.80	1.31	1.13
3/4	6-S30	LL6-S30	3/4-14	—	2.22	1.69	1.44
3/4	6-S30BS	—	—	3/4-14	2.03	1.69	1.44
1	8-S35	—	1-11 ¹ / ₂	—	2.53	2.00	1.75
1	8-S35BS	—	—	1-11	2.37	2.00	1.75

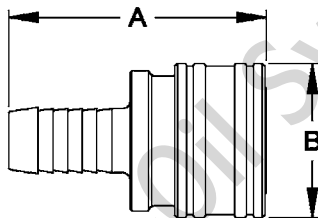
Female End Connections



Body Size	Part Number		Thread Size		Dimensions		
	Brass	Stainless	NPTF	BSPF	A	B	Hex
1/8	1-S11	LL1-S11	1/8-27	—	1.06	0.69	0.50
1/8	1-S11BS	LL1-S11BS	—	1/8-28	1.03	0.69	0.56
1/4	2-S16	LL2-S16	1/4-18	—	1.50	0.94	0.81
1/4	2-S16BS	LL2-S16BS	—	1/4-19	1.50	0.94	0.81
3/8	3-S21	LL3-S21	3/8-18	—	1.59	1.13	1.00
3/8	3-S21BS	LL3-S21BS	—	3/8-19	1.59	1.13	1.00
1/2	4-S26	LL4-S26	1/2-14	—	1.91	1.31	1.13
1/2	4-S26BS	LL4-S26BS	—	1/2-14	1.91	1.31	1.13
3/4	6-S31	LL6-S31	3/4-14	—	2.06	1.69	1.44
3/4	6-S31BS	LL6-S31BS	—	3/4-14	2.06	1.69	1.44
1	8-S36	LL8-S36	1-11 ¹ / ₂	—	2.31	2.00	1.75
1	8-S36BS	LL8-S36BS	—	1-11	2.33	2.00	1.75
1 ¹ / ₄	10-S41*	LL10-S41	1 ¹ / ₄ -11 ¹ / ₂	—	2.44	2.50	2.00
1 ¹ / ₄	10-S41BS*	—	—	1 ¹ / ₄ -11	2.51	2.50	2.00
1 ¹ / ₂	12-S46*	LL12-S46	1 ¹ / ₂ -11 ¹ / ₂	—	2.88	3.13	2.63
1 ¹ / ₂	12-S46BS*	LL12-S46BS	—	1 ¹ / ₂ -11	2.88	3.13	2.63
2	16-S51*	LL16-S51	2-11 ¹ / ₂	—	3.09	3.75	3.00
2	16-S51BS*	LL16-S51BS	—	2-11	3.30	3.75	3.00
2 ¹ / ₂	20-S56*	—	2 ¹ / ₂ -8	—	3.44	4.50	3.50

* With Steel Sleeve

Hose Stem Connections

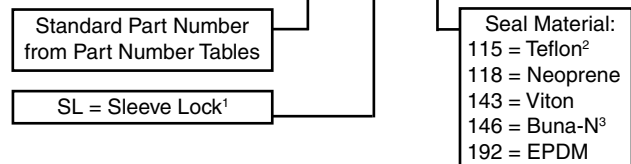


Body Size	Part Number		Hose I.D.	Dimensions	
	Brass	Stainless		A	B
1/8	1-S12	LL1-S12	3/16"	1.41	0.69
1/8	1-S17	LL1-S17	1/4"	1.41	0.69
1/4	2-S17	LL2-S17	1/4"	2.10	0.94
3/8	3-S22	LL3-S22	3/8"	2.09	1.13
1/2	4-S27	LL4-S27	1/2"	2.19	1.31
3/4	6-S32	LL6-S32	3/4"	3.19	1.69
1	8-S37	LL8-S37	1"	3.32	2.00

How to build a socket part number with options:

- Notes:
- 1) The Sleeve Lock device prevents accidental disconnection.
 - 2) Series ST couplings are designed for use with elastomer seals. Teflon is not an elastomer. It is rigid and not resilient. Couplings with Teflon seals may leak and/or be difficult to connect. Force to connect may be reduced by heating connected couplings in hot water; then, cooling before disconnecting. Teflon seals are available for Series 1-ST through 8-ST.
 - 3) The 146 seal option may be specified for fuels and hydraulic fluids that cause standard Buna-N seals to swell excessively.
 - 4) Some part numbers may be subject to minimum order quantities.
 - 5) Some options may be available only by special quotation. Consult your Hansen distributor.

Example: 3-S21 - SL - 143



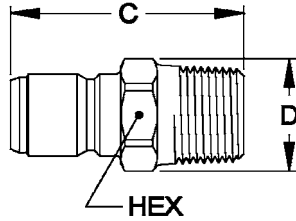
All dimensions in inches.

Series ST Straight-Through



Plugs

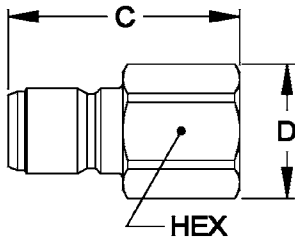
Male End Connections



Body Size	Part Number			Thread Size		Dimensions		
	Brass	Steel	Stainless	NPTF	BSPF	C	D	Hex
1/8	B1-T10	1-T10	LL1-T10	1/8-27	—	1.09	0.51	0.44
1/8	B1-T10BS	—	—	—	1/8-28	0.89	0.65	0.56
1/8	B1-T15	1-T15	—	1/4-18	—	1.25	0.65	0.56
1/4	B2-T15	2-T15	LL2-T15	1/4-18	—	1.61	0.65	0.56
1/4	—	—	HL2-T15*	1/4-18	—	1.61	0.65	0.56
1/4	B2-T15BS	2-T15BS	LL2-T15BS	—	1/4-19	1.35	0.87	0.75
3/8	B3-T20	3-T20	LL3-T20	3/8-18	—	1.69	0.79	0.69
3/8	—	—	HL3-T20*	3/8-18	—	1.69	0.79	0.69
3/8	B3-T20BS	3-T20BS	LL3-T20BS	—	3/8-19	1.50	1.01	0.88
1/2	B4-T25	4-T25	LL4-T25	1/2-14	—	2.03	1.01	0.88
1/2	B4-T25BS	4-T25BS	LL4-T25BS	—	1/2-14	1.77	1.15	1.00
3/4	B6-T30	6-T30	LL6-T30	3/4-14	—	2.25	1.23	1.06
3/4	B6-T30BS	—	LL6-T30BS	—	3/4-14	2.00	1.44	1.25
1	B8-T35	8-T35	LL8-T35	1-11/2	—	2.53	1.59	1.38
1	B8-T35BS	—	—	—	1-11	2.30	2.02	1.75
1 1/4	B10-T40	10-T40	LL10-T40	1 1/4-11 1/2	—	2.72	2.02	1.75
1 1/4	B10-T40BS	—	—	—	1 1/4-11	2.50	2.31	2.00
1 1/2	B12-T45	12-T45	—	1 1/2-11 1/2	—	3.31	2.60	2.25
1 1/2	B12-T45BS	—	—	—	1 1/2-11	3.06	2.60	2.25
2	B16-T50	16-T50	LL16-T50	2-11 1/2	—	3.50	3.18	2.75
2	—	—	LL16-T50BS	—	2-11	3.50	3.18	2.75
2 1/2	B20-T55	—	—	2 1/2-8	—	3.97	3.75	3.25

*High impulse heat treated 416 stainless steel

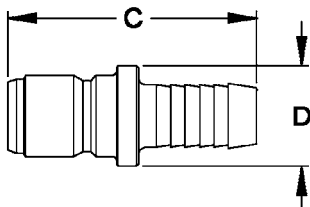
Female End Connections



Body Size	Part Number			Thread Size		Dimensions		
	Brass	Steel	Stainless	NPTF	BSPF	C	D	Hex
1/8	B1-T11	1-T11	LL1-T11	1/8-27	—	1.00	0.58	0.50
1/8	B1-T11BS	—	LL1-T11BS	—	1/8-28	0.97	0.65	0.56
1/4	B2-T16	2-T16	LL2-T16	1/4-18	—	1.50	0.79	0.69
1/4	—	—	HL2-T16*	1/4-18	—	1.50	0.79	0.69
1/4	B2-T16BS	2-T16BS	LL2-T16BS	—	1/4-19	1.45	0.87	0.75
3/8	B3-T21	3-T21	LL3-T21	3/8-18	—	1.63	0.94	0.81
3/8	—	—	HL3-T21*	3/8-18	—	1.63	0.94	0.81
3/8	B3-T21BS	3-T21BS	LL3-T21BS	—	3/8-19	1.63	1.01	0.88
1/2	B4-T26	4-T26	LL4-T26	1/2-14	—	1.94	1.15	1.00
1/2	B4-T26BS	4-T26BS	LL4-T26BS	—	1/2-14	1.92	1.23	1.06
3/4	B6-T31	6-T31	LL6-T31	3/4-14	—	2.06	1.37	1.19
3/4	B6-T31BS	—	LL6-T31BS	—	3/4-14	2.01	1.52	1.31
1	B8-T36	8-T36	LL8-T36	1-11 1/2	—	2.21	1.80	1.56
1	B8-T36BS	8-T36BS	LL8-T36BS	—	1-11	2.23	1.80	1.56
1 1/4	B10-T41	10-T41	LL10-T41	1 1/4-11 1/2	—	2.34	2.31	2.00
1 1/4	B10-T41BS	—	—	—	1 1/4-11	2.44	2.31	2.00
1 1/2	B12-T46	12-T46	LL12-T46	1 1/2-11 1/2	—	2.88	2.60	2.25
1 1/2	B12-T46BS	—	—	—	1 1/2-11	2.88	2.60	2.25
2	B16-T51	16-T51	—	2-11 1/2	—	3.03	3.18	2.75
2	B16-T51BS	—	—	—	2-11	3.25	3.18	2.75
2 1/2	B20-T56	20-T56	—	2 1/2-8	—	3.37	3.75	3.25

*High impulse heat treated 416 stainless steel

Hose Stem Connections



Body Size	Part Number			Hose I.D.	Dimensions	
	Brass	Steel	Stainless		C	D
1/8	B1-T12	—	LL1-T12	3/16"	1.28	0.44
1/8	B1-T17	—	LL1-T17	1/4"	1.28	0.44
1/4	B2-T17	2-T17	LL2-T17	1/4"	1.93	0.56
3/8	B3-T22	3-T22	LL3-T22	3/8"	2.09	0.69
1/2	B4-T27	4-T27	LL4-T27	1/2"	2.17	0.88
3/4	B6-T32	6-T32	LL6-T32	3/4"	3.17	1.19
1	B8-T37	8-T37	—	1"	3.28	1.50

Any plug will connect with any socket in the same series (same body size)

All dimensions in inches.

STRAIGHT-THROUGH



Series P2-ST & P3-ST

Series P2-ST and P3-ST couplings are designed for use with medical equipment. They can also be used in a variety of low pressure fluid transfer applications.

Features

- Interchange with 2-ST and 3-ST
- Excellent chemical resistance
- Light weight
- Low cost

Standard Materials

- Polypropylene construction
- Buna-N (Nitrile) seals

Rated Pressure

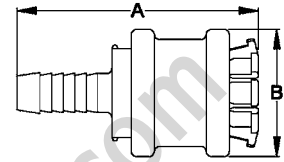
Temperature*	PSI	BAR
75°	110	8
200°	30	2

*235°F maximum sterilization temperature



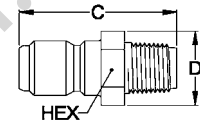
SOCKETS

Series	Part Number	Hose I.D.	Dimensions	
			A	B
P2-ST	P2-ST5-25H	1/4"	2.07	1.12
Each P2-ST socket uses one Part No. 902-7 o-ring.				
P3-ST	P3-ST5-37H	3/8"	2.61	1.37
Each P3-ST socket uses one Part No. 902-10-199 o-ring.				

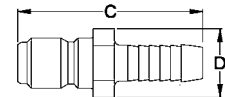


PLUGS

Series	Part Number	Thread Size	Dimensions		
			C	D	HEX
P2-ST	P2-STP-25M	1/4-18 NPTF	1.56	0.65	0.56
P3-ST	P3-STP-25M	1/4-18 NPTF	1.69	0.79	0.69
P3-ST	P3-STP-37M	3/8-18 NPTF	1.69	0.79	0.69



Series	Part Number	Hose I.D.	Dimensions	
			C	D
P3-ST	P3-STP-37H	3/8"	2.16	0.79



Series GH Garden Hose

Series GH couplings are designed for water service where hoses are connected and disconnected frequently. They are available with garden hose threads and 3/4" pipe threads. Sockets are available without valves for maximum flow and with valves for convenience of operation.

Features

- Durable brass construction
- Ball lock
- High quality Buna-N seals
- Straight-through or one-way shut-off

Standard Materials

- Brass plug and socket bodies
- Nickel plated brass sleeve
- Stainless steel balls and springs
- Buna-N o-ring and washer
- Plastic (acetal) valve

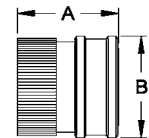
Rated Pressure

PSI	BAR
200	14

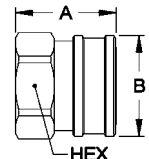


SOCKETS

Part No.	Female Hose Thread	Dimensions		
		A	B	
GHS-12	Non-valved	3/4-11 ¹ / ₂	1.19	1.19
GHS-12-V	Valved	3/4-11 ¹ / ₂	1.19	1.19

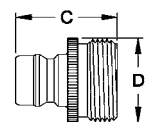


Part No.	Female Pipe Thread	Dimensions			
		A	B	HEX	
8-GHS-75FS	Non-valved	3/4-14 NPTF	1.18	1.25	1.13
8-GHS-75FS-V	Valved	3/4-14 NPTF	1.18	1.25	1.13

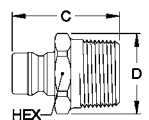


PLUGS

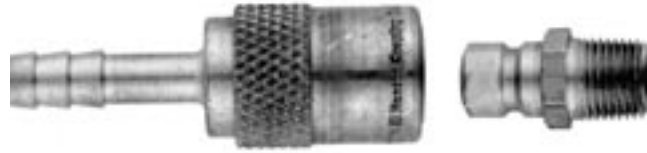
Part No.	Male Hose Thread	Dimensions	
		C	D
GHP-11	3/4-11 ¹ / ₂	1.30	1.06



Part No.	Male Pipe Thread	Dimensions		
		C	D	HEX
8-GHP-75M	3/4-14 NPTF	1.66	1.18	1.06



STRAIGHT-THROUGH



Flo-Temp couplings provide the flow needed to cool or heat injection molds and die casting dies. Sockets are available non-valved for maximum flow, and valved to prevent fluid loss when disconnected. Flo-Temp couplings can be used with water-glycol, hot water and hot oil. Body sizes are 1/4", 3/8" and 1/2".

Features

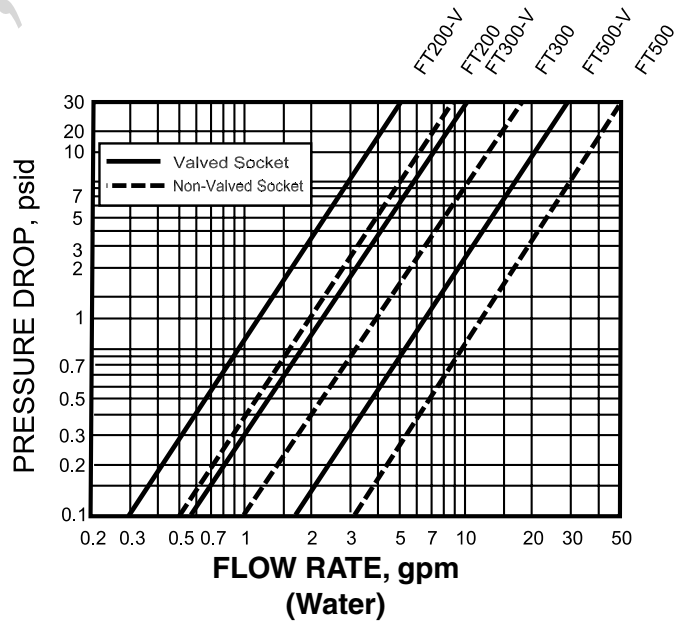
- Non-valved straight-through models for maximum flow
- Valved sockets for automatic shut-off when line is disconnected
- Sockets with straight, 90° and 45° hose stems and without hose stem
- Brass plugs with male pipe thread for recessed mounting to avoid damage to plugs when molds are being changed or stored

Standard Materials

- Brass socket construction
- Stainless steel springs and locking balls
- Viton seals (-30°F to +450°F)
- Brass plugs

Rated Pressure

Series	PSI	BAR
200/300/500	200	14



STRAIGHT-THROUGH

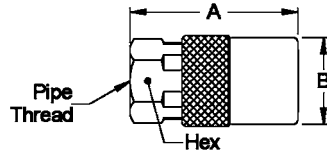
Replacement Parts

Description	Part Number		
	Series 200	Series 300	Series 500
Seal	WFT-200-228	WFT-300-228	WFT-500-228
Valve	VFT-200	VFT-300	VFT-500
Valve O-Ring	902-3-143	903-8-143	914-3-143
Valve Spring	VSFT-200	VS-3000	VSFT-500



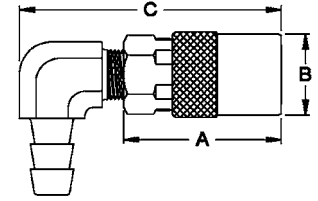
Series FLO-TEMP 200/300/500

SOCKETS



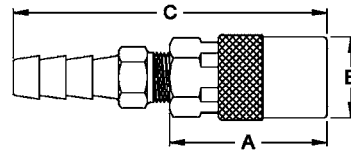
Without Hose Stem

Body Size (inch)	Part Number	Dimensions (inches)			Thread Size NPTF
		A	B	Hex	
1/4	LNFT-200	1.68	0.67	0.56	1/8-27
3/8	LNFT-300	2.18	0.89	0.75	1/4-18
1/2	LNFT-500	2.00	1.17	1.13	1/2-14



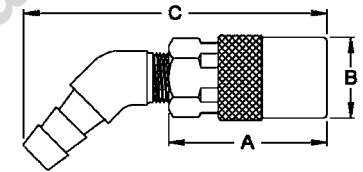
90° Hose Stem

Body Size (inch)	Part Number		Hose I.D.	Dimensions (inches)		
	Non-Valved	Valved		A	B	Hex
1/4	FTS-214	FTS-214V	1/4"	1.36	0.67	2.17
1/4	FTS-214HP*	FTS-214VHP*	1/4"	1.18	0.67	1.76
1/4	FTS-215	FTS-215V	5/16"	1.18	0.67	1.76
1/4	FTS-216	FTS-216V	3/8"	1.17	0.67	1.76
1/4	FTS-216HP*	FTS-216VHP*	3/8"	1.17	0.67	1.76
3/8	FTS-316	FTS-316V	3/8"	1.60	0.88	2.43
3/8	FTS-316HP*	FTS-316VHP*	3/8"	1.60	0.88	2.43
3/8	FTS-318	FTS-318V	1/2"	1.60	0.88	2.43
3/8	FTS-318HP*	FTS-318VHP*	1/2"	1.60	0.88	2.43



Straight Hose Stem

Body Size (inch)	Part Number		Hose I.D.	Dimensions (inches)		
	Non-Valved	Valved		A	B	Hex
1/4	FTS-204	FTS-204V	1/4"	1.20	0.67	2.25
1/4	FTS-204HP*	FTS-204VHP*	1/4"	1.20	0.67	2.09
1/4	FTS-205	FTS-205V	5/16"	1.20	0.67	2.09
1/4	FTS-206	FTS-206V	3/8"	1.20	0.67	2.25
1/4	FTS-206HP*	FTS-206VHP*	3/8"	1.20	0.67	2.34
3/8	FTS-306	FTS-306V	3/8"	1.6	0.91	2.68
3/8	FTS-306HP*	FTS-306VHP*	3/8"	1.61	0.89	2.75
3/8	FTS-308	FTS-308V	1/2"	1.61	0.88	2.82
3/8	FTS-308HP*	FTS-308VHP*	1/2"	1.61	0.88	2.82
1/2	FTS-504	FTS-504V	1/2"	2.25	1.18	3.42
1/2	FTS-504HP*	FTS-504VHP*	1/2"	2.25	1.18	3.62
1/2	FTS-506	FTS-506V	3/4"	2.22	1.18	3.85
1/2	FTS-506HP*	FTS-506VHP*	3/4"	2.22	1.18	4.35

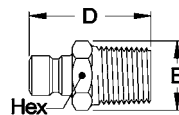


45° Hose Stem

Body Size (inch)	Part Number		Hose I.D.	Dimensions (inches)		
	Non-Valved	Valved		A	B	Hex
1/4	FTS-224	FTS-224V	1/4"	1.17	0.67	2.40
1/4	FTS-224HP*	FTS-224VHP*	1/4"	1.17	0.67	2.40
1/4	FTS-225	FTS-225V	5/16"	1.17	0.67	2.40
1/4	FTS-226	FTS-226V	3/8"	1.17	0.67	2.40
1/4	FTS-226HP*	FTS-226VHP*	3/8"	1.17	0.67	2.40
3/8	FTS-326	FTS-326V	3/8"	1.80	0.90	3.70
3/8	FTS-326HP*	FTS-326VHP*	3/8"	1.80	0.90	3.17
3/8	FTS-328	FTS-328V	1/2"	1.80	0.90	3.17
3/8	FTS-328HP*	FTS-328VHP*	1/2"	1.80	0.90	3.17

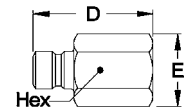
*Part numbers with HP suffix have push-on hose barb. All other FTS part numbers have standard hose barb.

PLUGS



Male Pipe Thread

Body Size (inch)	Part Number	Thread Size	Dimensions (inches)			Installation Recess	
			D	E	Hex	Dia.	Depth
1/4	FTP-251	1/8-27 NPTF	0.94	0.49	0.44	0.69	0.69
1/4	FTP-251BST	1/8-28 BSPT	0.94	0.49	0.44	0.69	0.69
1/4	FTP-252	1/4-18 NPTF	1.15	0.63	0.56	0.84	0.94
1/4	FTP-252BST	1/4-19 BSPT	1.15	0.63	0.56	0.84	0.94
1/4	FTP-253	3/8-18 NPTF	1.19	0.77	0.69	1.00	0.94
3/8	FTP-352	1/4-18 NPTF	1.40	0.63	0.56	1.00	1.09
3/8	FTP-352BST	1/4-19 BSPT	1.40	0.63	0.56	1.00	1.09
3/8	FTP-353	3/8-18 NPTF	1.40	0.77	0.69	1.00	1.13
3/8	FTP-353BST	3/8-19 BSPT	1.40	0.77	0.69	1.00	1.13
3/8	FTP-354	1/2-14 NPTF	1.56	0.98	0.88	1.19	1.25
1/2	FTP-554	1/2-14 NPTF	1.75	0.98	0.88	1.25	1.50
1/2	FTP-556	3/4-14 NPTF	1.75	1.26	1.13	1.50	1.56



Female Pipe Thread

Body Size (inch)	Part Number	Thread Size	Dimensions (inches)		
			D	E	Hex
1/4	FTP-251-F	1/8-27 NPTF	1.00	0.58	0.50
1/4	FTP-251-FBS	1/8-28 BSPP	1.00	0.65	0.56
1/4	FTP-252-F	1/4-18 NPTF	1.20	0.72	0.63
1/4	FTP-252-FBS	1/4-19 BSPP	1.20	0.87	0.75
1/4	FTP-253-F	3/8-18 NPTF	1.25	0.87	0.75
3/8	FTP-352-F	1/4-18 NPTF	1.38	0.72	0.63
3/8	FTP-352-FBS	1/4-19 BSPP	1.28	0.87	0.75
3/8	FTP-353-F	3/8-18 NPTF	1.40	0.87	0.75
3/8	FTP-353-FBS	3/8-19 BSPP	1.40	1.01	0.88
3/8	FTP-354-F	1/2-14 NPTF	1.62	1.08	0.94
1/2	FTP-554-F	1/2-14 NPTF	1.72	1.08	0.94
1/2	FTP-556-F	3/4-14 NPTF	1.78	1.30	1.13

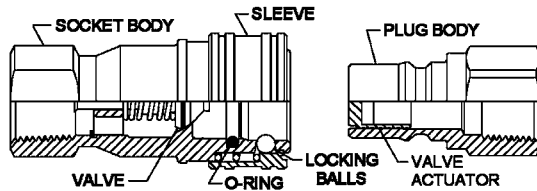
GAS COUPLINGS



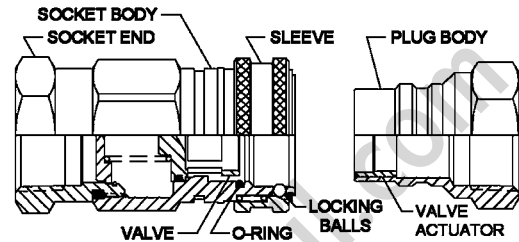


Series Gas-Mate

3/8" to 1" Gas-Mate



1 1/4" Gas-Mate



Gas-Mate couplings are one-way shut-off safety couplings designed for use with various fuel gases. Body sizes are 3/8", 1/2", 3/4", 1" and 1 1/4".

Features

- Connect and disconnect without using wrenches
- Automatic shut-off when plug is removed from socket
- In case of fire, heat-sensitive plug allows socket valve to close, stopping gas flow
- Push-to-connect (1 1/4" only)

For connection of gas cooking appliances and other gas-fired devices.

CSA* design certified, in both the United States and Canada, for natural gas, manufactured gas, liquified petroleum and LP gas-air mixtures at pressures not in excess of 1/2 psig (3.5 kPa)

*CANADIAN STANDARDS ASSOCIATION



Complies with the requirements of ANSI Z21.41 & CSA 6.9.

Standard Materials

- Brass construction
- Stainless steel locking balls
- Viton socket o-ring
- Valve actuator soldered to plug with low melting temperature alloy.

Accessories

- Dust caps and dust plugs (See page 68.)

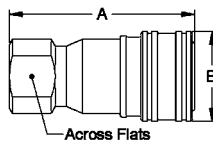
Capacities

Body Size	Socket Part No.	Plug Part No.	Capacity* BTU/hr	Socket O-Ring Part No.
3/8"	100-006	100-506	60,000	914-3-143M
1/2"	100-008	100-508	90,000	902-14-143M
3/4"	100-010	100-510	245,000	902-18-143M
1"	100-012	100-512	310,000	902-23-143M
1 1/4"	GMS1250FH	GMP1250F	500,000	914-26-143M

* Capacity is based on natural gas having a specific gravity of 0.64 and a heat capacity of 1,000 BTU per cubic foot. Inlet pressure is 12 inches water column and the pressure drop is 0.3 inch water column.

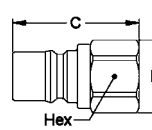
Sockets

Body Size	Part No.	Thread Size NPTF	Dimensions		
			A	B	Across Flats
3/8"	100-006	3/8-18	2.44	1.13	1.00
1/2"	100-008	1/2-14	2.84	1.38	1.13
3/4"	100-010	3/4-14	3.17	1.75	1.50
1"	100-012	1-11 1/2	3.94	2.13	1.75

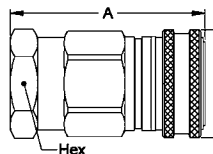


Plugs

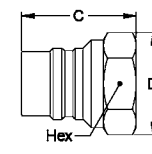
Body Size	Part No.	Thread Size NPTF	Dimensions		
			C	D	HEX
3/8"	100-506	3/8-18	1.59	0.94	0.81
1/2"	100-508	1/2-14	1.94	1.16	1.00
3/4"	100-510	3/4-14	2.06	1.52	1.31
1"	100-512	1-11 1/2	2.47	1.73	1.50



Body Size	Part No.	Thread Size NPTF	Dimensions		
			A	B	Hex
1 1/4"	GMS1250FH	1 1/4-11 1/2	4.15	2.28	2.00



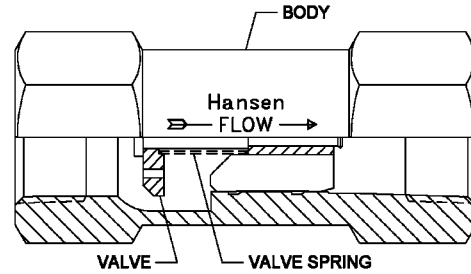
Body Size	Part No.	Thread Size NPTF	Dimensions		
			C	D	HEX
1 1/4"	GMP1250F	1 1/4-11 1/2	2.44	2.16	1.88



GAS COUPLINGS



Series FS Flow Sensor



Series FS Flow Sensors are designed to protect personnel and property in case of hose failure in compliance with Federal Safety Regulations. Flow Sensors are intended for use with compressed air.

Features

- Automatically shuts off air flow to ruptured hose
- Reduces risk of injury or damage from hose whip
- Automatically resets after failure correction
- 250 psig pressure rating (all sizes)
- Low pressure drop
- Operates in any orientation
- Compact design, economical, tamper-resistant

Standard Materials

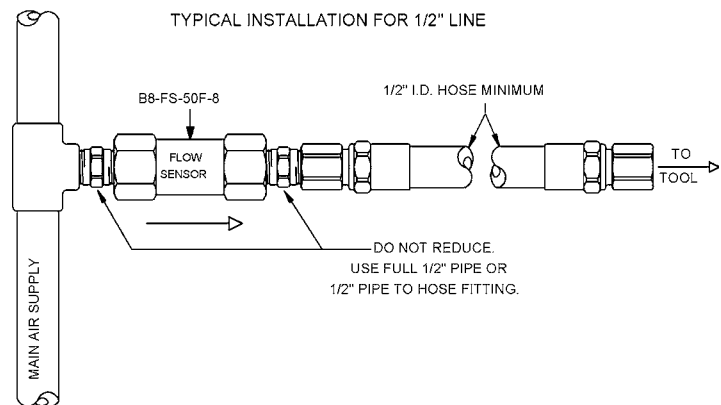
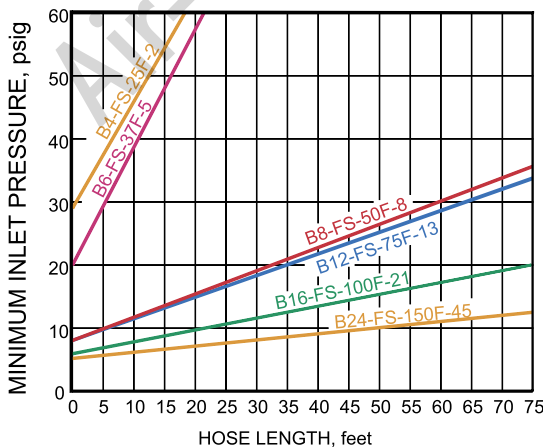
- Brass body
- Acetal valve (1/4" - 1")
- Brass valve (1 1/2")
- Stainless steel valve spring

Body Size	Part Number	Thread Size, NPTF	SHUT-OFF FLOW, scfm, at Inlet Pressure, psig								Dimensions	
			60	80	100	120	140	160	180	200	Length	Hex
1/4"	B4-FS-25F-2	1/4-18	16	18	20	22	23	25	26	27	2.14	0.75
3/8"	B6-FS-37F-5	3/8-18	41	46	50	55	59	63	66	69	2.50	0.88
1/2"	B8-FS-50F-8	1/2-14	65	73	80	87	93	99	104	109	3.12	1.06
3/4"	B12-FS-75F-13	3/4-14	105	118	130	141	152	161	169	177	3.68	1.38
1"	B16-FS-100F-21	1-11 1/2	170	191	210	227	245	260	273	286	4.59	1.75
1-1/2"	B24-FS-150F-45	1 1/2-11 1/2	365	410	450	489	525	557	586	615	5.86	2.50

All Flow Sensors have a pressure drop of approximately 2 psid at 80% of shut-off flow.

Flow Data - The graph below left indicates the minimum inlet pressure for various hose lengths. Each Flow Sensor has a shut-off flow rating dependent upon inlet pressure. The length of hose and fitting size are critical in the proper operation of the valve. For example, with the B8-FS-50F-8 Flow Sensor, the hose I.D. must be 1/2" using only 1/2" pipe thread end fittings. Thirty feet of hose requires at least 20 psig inlet pressure; fifty feet of hose requires at least 28 psig inlet pressure; and seventy-five feet of hose requires at least 36 psig inlet pressure. Inlet pressures lower than those indicated on the curves below will not guarantee protection in case of hose failure. Valve shut-off occurs only when flow exceeds the flow rating for the inlet pressure.

If hose lengths greater than 75 feet are required, a 1/2" size or larger Flow Sensor must be installed on the inlet end of each 75-foot section, and a correspondingly higher inlet pressure must be supplied for proper operation of the Flow Sensor to assure safety.

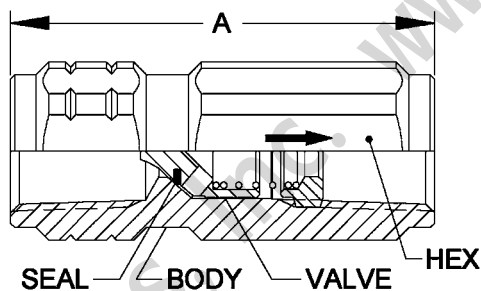


All dimensions in inches.

Series RA 4000 in-line check valves are designed for use in hydraulic circuits. They are rugged and reliable, offer low pressure drop and have elastomer valve seals for leak-free operation. Available sizes are 1/4" to 1".

Features

- One-piece zinc plated steel body
- One-piece high strength steel valve provides excellent reliability under severe operating conditions
- The valve has a captive nitrile (Buna-N) seal, assuring no leakage at low and high pressures
- Low pressure drop versus flow
- Female NPTF end connections
- Cracking pressure: 7 psi (0.5 bar)



Size (inch)	Part No.	Thread NPTF	Dimensions		*Rated Pressure	
			A	Hex	PSI	BAR
1/4	RA 04210 00	1/4-18	1.97	0.75	10,150	700
3/8	RA 04220 00	3/8-18	2.36	0.91	10,150	700
1/2	RA 04230 00	1/2-14	2.76	1.06	7,250	500
3/4	RA 04240 00	3/4-14	3.39	1.38	7,250	500
1	RA 04250 00	1-11½	3.94	1.62	7,250	500

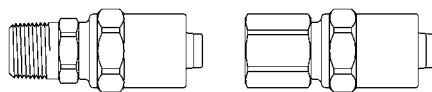
*Pressure ratings are given for valves in an open position with a constant flow.

Air-Oil Systems

Fittings

Hose Clamps (Brass) • Compression Type, Reusable

Male Pipe Thread (MPT) Female Pipe Thread (FPT)



1/8-27 NPTF

	Hose		Part No.	
	I.D.	O.D.	MPT	FPT
Series A	3/16"	7/16"	1A0	—
	3/16"	1/2"	1A3	—
Series B	1/4"	15/32"	1B1	—
	1/4"	1/2"	1B3	—
	1/4"	9/16"	1B5	—
	1/4"	5/8"	1B7	—
	1/4"	3/4"	1B11	—

3/8-18 NPTF

	Hose		Part No.	
	I.D.	O.D.	MPT	FPT
Series B	1/4"	15/32"	4B1	—
	1/4"	1/2"	4B3	—
	1/4"	9/16"	4B5	—
Series C	1/4"	5/8"	4B7	—
	5/16"	5/8"	4C7	—
	5/16"	11/16"	4C9	—
Series D	3/8"	9/16"	4D5	5D5
	3/8"	5/8"	4D7	5D7
	3/8"	11/16"	4D9	5D9
	3/8"	3/4"	4D11	5D11
	3/8"	13/16"	4D13	5D13
	3/8"	7/8"	4D15	5D15
Series P	1/2"	13/16"	4P13	—
	1/2"	7/8"	4P15	—
	1/2"	15/16"	4P17	—
	1/2"	1"	4P19	—

3/4-14 NPTF

	Hose		Part No.	
	I.D.	O.D.	MPT	FPT
Series P	1/2"	13/16"	8P13	—
	1/2"	7/8"	8P15	—
	1/2"	15/16"	8P17	—
Series R	1/2"	1"	8P19	—
	3/4"	1 1/8"	8R23	—
	3/4"	1 3/16"	8R25	—
	3/4"	1 1/4"	8R27	—

1/4-18 NPTF

	Hose		Part No.	
	I.D.	O.D.	MPT	FPT
Series A	3/16"	7/16"	2A0	—
	3/16"	1/2"	2A3	—
Series B	1/4"	15/32"	2B1	3B1
	1/4"	1/2"	2B3	3B3
	1/4"	9/16"	2B5	3B5
	1/4"	5/8"	2B7	3B7
	1/4"	11/16"	2B9	3B9
Series C	5/16"	9/16"	2C5	—
	5/16"	5/8"	2C7	3C7
	5/16"	11/16"	2C9	—
Series D	3/8"	9/16"	2D5	3D5
	3/8"	5/8"	2D7	3D7
	3/8"	11/16"	2D9	3D9
	3/8"	3/4"	2D11	3D11
	3/8"	13/16"	2D13	3D13
	3/8"	7/8"	2D15	3D15
Series P	1/2"	13/16"	2P13	—
	1/2"	7/8"	2P15	—
	1/2"	15/16"	2P17	—
	1/2"	1"	2P19	—

1-11 1/2 NPTF

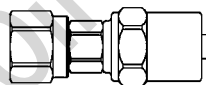
	Hose		Part No.	
	I.D.	O.D.	MPT	FPT
Series R	3/4"	1 1/8"	10R23	—
	3/4"	1 3/16"	10R25	—
	3/4"	1 1/4"	10R27	—

1/2-14 NPTF

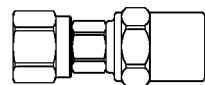
	Hose		Part No.	
	I.D.	O.D.	MPT	FPT
Series P	1/2"	13/16"	6P13	7P13
	1/2"	7/8"	6P15	7P15
	1/2"	15/16"	6P17	7P17
	1/2"	1"	6P19	7P19
Series R	3/4"	1 1/8"	6R23	—
	3/4"	1 3/16"	6R25	—
	3/4"	1 1/4"	6R27	—

Swivel Nut Hose Clamps (Brass) • Compression Type, Reusable

With Brass Male Swivel Insert – External Seat (inverted flare) for use with paint spray and oxygen fittings, etc. (Will accept 37° or 45° flare.). The Swivel Nut Hose Clamp is similar to the standard hose clamp, but includes a swivel nut.



With Steel Female Swivel Insert, 37° Female Flare, for use with flared tube fittings.



9/16-18 Straight Thread

	Hose		Part
	I.D.	O.D.	No.
Series A	3/16"	7/16"	4LA0*
	3/16"	7/16"	4RA0
	3/16"	1/2"	4LA3*
Series B	3/16"	1/2"	4RA3
	1/4"	15/32"	4RB1
	1/4"	1/2"	4LB3*
	1/4"	1/2"	4RB3
	1/4"	9/16"	4LB5*
Series D	1/4"	9/16"	4RB5
	1/4"	5/8"	4RB7
	3/8"	5/8"	4RD7
	3/8"	11/16"	4RD9
	3/8"	3/4"	4RD11

1/4-18 NPSM Straight Thread

	Hose		Part
	I.D.	O.D.	No.
Series B	1/4"	15/32"	5RB1
	1/4"	1/2"	5RB3
	1/4"	9/16"	5RB5
	1/4"	5/8"	5RB7
Series C	5/16"	5/8"	5RC7
Series D	3/8"	5/8"	5RD7
	3/8"	11/16"	5RD9
	3/8"	3/4"	5RD11

7/16-20 Straight Thread

	Hose		Part
	I.D.	O.D.	No.
Series B	1/4"	15/32"	720B1
	1/4"	1/2"	720B3
	1/4"	9/16"	720B5
	1/4"	5/8"	720B7

5/8-18 Straight Thread

	Hose		Part
	I.D.	O.D.	No.
Series D	3/8"	5/8"	2FD7
	3/8"	11/16"	2FD9
	3/8"	3/4"	2FD11

9/16-18 Straight Thread

	Hose		Part
	I.D.	O.D.	No.
Series D	3/8"	5/8"	4FD7
	3/8"	11/16"	4FD9
	3/8"	3/4"	4FD11
	3/8"	7/8"	4FD15

3/4-16 Straight Thread

	Hose		Part
	I.D.	O.D.	No.
Series P	1/2"	13/16"	1216P13
	1/2"	7/8"	1216P15

* Left-hand thread for acetylene service

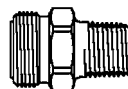
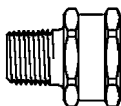
Hose Stems



Hose Stem-to-Male Pipe Thread

Hose I.D.	Thread NPTF	Part No.	
		Brass	Stainless
3/16"	1/8-27	SN16	LLS16
1/4"	1/8-27	SN17	—
3/8"	1/8-27	SN18	—
3/16"	1/4-18	S19	—
1/4"	1/4-18	S20	LLS20
5/16"	1/4-18	S205	—
3/8"	1/4-18	S21	—
1/2"	1/4-18	S22	—
1/4"	3/8-18	S23	—
3/8"	3/8-18	S24	LLS24
1/2"	3/8-18	S25	—
1/2"	1/2-14	S26	LLS26
3/4"	3/4-14	—	LLS30
1"	1-11 1/2	—	LLS35

Unions (Brass)

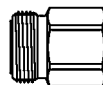
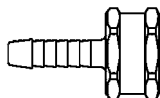


Part No. H25MHU

1/4" Male Pipe Thread
Union Half consists of H25MHU01 body and 902-8 o-ring.

Part No. HHU25M

1/4" Male Pipe Thread
Union Half



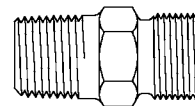
Part No. H25HHU

1/4" Hose Stem
Union Half consists of H25HHU01 stem, 902-8 o-ring and HUSN1 sleeve

Part No. HHU25F

1/4" Female Pipe
Thread Union Half

Adapters

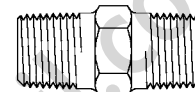


Oxygen Adapter (Brass)

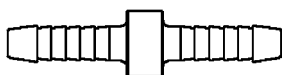
Part No.	Thread Size
9-MBR	1/4-18 NPTF x 9/16-18 Right Hand

Pipe-to-Pipe Adapter (Brass)

Part No.	Thread Size
18-MAM	1/8-27 NPTF x 1/4-18 NPTF
19-MBM	1/4-18 NPTF x 1/4-18 NPTF
20-MBM	1/4-18 NPTF x 3/8-18 NPTF

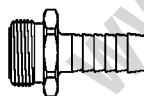
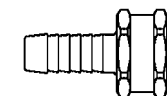


Splicers (Brass)



Hose Stem-to-Hose Stem

Hose I.D.	Part No.
3/16"	HS-30
1/4"	HS-31
5/16"	HS-32
3/8"	HS-33
1/2"	HS-34



Part No. H37HHU

3/8" Hose Stem
Union Half consists of H37HHU01 stem, 902-8 o-ring and HUSN1 sleeve

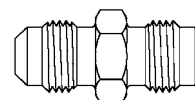
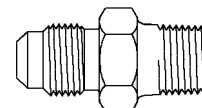
Part No. HHU37H

3/8" Hose Stem
Union Half

Any union half shown on the left can be used with any union half shown on the right.

Flare-to-Pipe Adapter (Stainless)

Part No.	Thread Size
A-402	7/16-20 (1/4" 45° Flare) x 1/4-18 NPTF

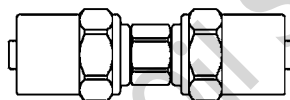


Flare-to-Flare Adapter (Stainless)

Part No.	Thread Size
A-394	7/16-20 (1/4" 45° Flare) Both Ends
A-375	5/8-18 (3/8" 45° Flare) Both Ends

Hose Clamp-to-Hose Clamp

Hose I.D.	Hose O.D.	Part No.
1/4"	15/32"	HSC-B1
1/4"	1/2"	HSC-B3
1/4"	5/8"	HSC-B7
5/16"	5/8"	HSC-C7
5/16"	11/16"	HSC-C9
3/8"	9/16"	HSC-D5
3/8"	5/8"	HSC-D7
3/8"	11/16"	HSC-D9
3/8"	3/4"	HSC-D11



All stainless steel fittings listed on this page are machined from Type 303 stainless steel bar stock.

Dust Caps and Dust Plugs

The use of dust caps and dust plugs keeps mating surfaces of disconnected couplings clean, and extends the useful life of seals and mechanical components. Plug dust caps prevent damage to plugs that could make a coupling unusable. All dust caps and plugs offered for Hansen couplings are listed on this page and the next.

HK-Style Dust Caps and Plugs

Vinyl Plug Dust Cap



Vinyl Socket Dust Plug



Metal Plug Dust Cap



Metal Socket Dust Plug



Coupling		Plug Dust Cap Part No.		Socket Dust Plug Part No.	
Type	Series	Metal	Vinyl	Metal	Vinyl
Two-Way	1-HK	PDC-1-HK*	P-PDC-1-HK	SDC-1-HK*	P-SDC-1-HK
	2-HK	PDC-2-HK*	P-PDC-2-HK	SDC-2-HK*	P-SDC-2-HK
	3-HK	PDC-3-HK*	P-PDC-3-HK	SDC-3-HK*	P-SDC-3-HK
	4-HK	PDC-4-HK**	P-PDC-4-HK	SDC-4-HK**	P-SDC-4-HK
	6-HK	PDC-6-HK**	P-PDC-6-HK	SDC-6-HK**	P-SDC-6-HK
	8-HK	PDC-8-HK**	P-PDC-8-HK	SDC-8-HK**	P-SDC-8-HK
	12-HK	PDC-12-HK**	—	SDC-12-HK**	—
	20-HK	PDC-20-HK**	—	SDC-20-HK**	—
	UP10	—	P-PDC-2-HK	—	P-SDC-2-HK
	2-HKIG	—	P-PDC-2-HK	—	—
	2-HKIL	—	P-PDC-2-HK	—	—
	3000	PDC-3000*	—	SDC-3000*	P-SDC-1-HK
	One-Way	4000	—	—	—
5000		—	P-PDC-2-HK	—	—
6000		—	P-PDC-3-HK	—	—
1000		—	—	—	P-SDC-1-HK
400		—	—	—	P-SDC-2-HK
100		—	P-PDC-1-HK	—	P-SDC-1-HK
600		—	P-PDC-1-HK	—	P-SDC-1-HK
700		—	P-PDC-1-HK	—	P-SDC-1-HK
2-RL		—	P-PDC-1-HK	—	P-SDC-1-HK
3-RL		—	P-PDC-2-HK	—	P-SDC-2-HK
Straight-Through	2-ST	—	—	—	P-SDC-1-HK
	3-ST	—	—	—	P-SDC-2-HK
	6-ST	—	P-PDC-4-HK	—	P-SDC-4-HK
	8-ST	—	P-PDC-6-HK	—	—
	10-ST	—	P-PDC-8-HK	—	—
Gas-Mate	3/8"	PDC-2-HK*	P-PDC-2-HK	SDC-2-HK*	P-SDC-2-HK
	1/2"	PDC-3-HK*	P-PDC-3-HK	SDC-3-HK*	P-SDC-3-HK
	3/4"	PDC-4-HK**	P-PDC-4-HK	SDC-4-HK**	P-SDC-4-HK
	1"	PDC-6-HK**	P-PDC-6-HK	SDC-6-HK**	P-SDC-6-HK

*Brass **Aluminum

Dust Caps and Dust Plugs

Series HA 15000 ISO 7241-1 Series A



Body Size (inch)	Part Number	
	Plug Dust Cap Vinyl	Socket Dust Plug Vinyl
1/4	HP 15112 00	HP 15111 00
3/8	HP 15122 00	HP 15121 00
1/2	HP 15132 00	HP 15131 00
3/4	HP 15142 00	HP 15141 00
1	HP 15152 00	HP 15151 00

Series QA 29000 Flat Face



Body Size (inch)	Part Number	
	Plug Dust Cap Aluminum	Socket Dust Cap Aluminum
1/4	QD 29112 00	QD 29111 00
3/8	QD 29122 00	QD 29121 00
3/4	QD 29142 00	QD 29141 00
1	QD 29152 00	QD 29151 00

Series 96 Wing Nut



Body Size (inch)	Part Number	
	Plug Dust Cap Brass	Socket Dust Plug Brass
3/4	PDC-96-075	SDC-96-075
1	PDC-96-100	SDC-96-100
1-1/4	PDC-96-125	SDC-96-125

Series WA 56000 10,000 psi Thread-to-Connect



Body Size (inch)	Part Number	
	Plug Dust Cap Steel	Socket Dust Plug Steel
1/4	WA 56114 00	WA 56117 00
3/8	WA 56124 00	WA 56127 00

Series WA 10000 Refrigerant and Liquid Transfer



Dash Size	Part Number	
	Male Half Dust Cap - Steel	Female Half Dust Plug - Steel
-8	WA 10134 00	WA 10137 00
-12	WA 10154 00	WA 10157 00
-16	WA 10164 00	WA 10167 00

Flex-Air Fittings

The Flex-Air Fitting is designed to rotate 360° at up to a 75° angle. The Flex-Air Fitting helps to alleviate Carpal Tunnel Syndrome and other stress related injuries in the workplace.

Features

- Unique design provides free 360° rotation with up to a 75° angle of rotation in any direction
- Many styles and sizes available
- 145 psig (10 Bar) pressure rating (all models)

Benefits

- Provides flexibility of tool position to help alleviate Carpal Tunnel Syndrome and back stress resulting in fewer lost-time injuries
- Minimizes paint damage
- Prevents kinking of air supply hose

Applications

- Assembly air lines in automotive, electronic and other industries
- Mechanical joints for robotics
- Vibration isolation
- Commercial and residential construction

Standard Materials

- Integrated steel/polyurethane construction
- Steel balls
- Buna-N (Nitrile) seals
- Thread sealant standard on male NPTs



Part Number	Description	Inside Dia.
FA25F-25M	1/4" NPT Female x 1/4" NPT Male	0.2" (5 mm)
FA25F-37M	1/4" NPT Female x 3/8" NPT Male	0.3" (7.5 mm)
FA37F-37M	3/8" NPT Female x 3/8" NPT Male	0.3" (7.5 mm)



Part Number	Description	Inside Dia.
FA25M-25M	1/4" NPT Male x 1/4" NPT Male	0.2" (5 mm)
FA37M-37M	3/8" NPT Female x 3/8" NPT Male	0.3" (7.5 mm)



Part Number	Description	Inside Dia.
FA25P-25M	1/4" Industrial Interchange x 1/4" NPT Male	0.2" (5 mm)
FA37P-25M	3/8" Industrial Interchange x 1/4" NPT Male	0.3" (7.5 mm)



Part Number	Description	Inside Dia.
FA25AR-25M	ARO210 Interchange x 1/4" NPT Male	0.2" (5 mm)



Part Number	Description	Inside Dia.
FA25LI-25M	Lincoln Interchange x 1/4" NPT Male	0.2" (5 mm)



Part Number	Description	Inside Dia.
FA37H-37M	3/8" Barb x 3/8" NPT Male	0.3" (7.5 mm)



Part Number	Description	Inside Dia.
FA3RL-37M	3/8" RL Plug x 3/8" NPT Male	0.3" (7.5 mm)

Elastomer Selection Guide

Select seals compatible with the service intended for the couplings. Allowance must be made for the kind of fluid to be conveyed and its temperature. Chemically active fluids will destroy some seal materials. Certain seals withstand high temperatures, whereas others cannot. Use this elastomer selection guide to find the appropriate seal. NOTE: Elastomer or seal material listed as "Standard" is furnished in most Hansen couplings. Elastomers designated as "-118", "-146", "-192", etc., are available as optional seal material for some couplings. Other seal materials available upon request to suit requirements. Consult a Hansen Distributor.

NOTE: The following information is accurate to the best of our knowledge; however, since service conditions vary so widely, it is intended as a guide only and is not a guarantee.

Seal Information

Dash No.	Compound
-***	Buna-N – 90 Durometer
-115	Teflon
-118	Neoprene
-143	Viton
-146	Buna-N – 70 Durometer
-192*	EPDM
-235†	Kalrez
-236*	EPDM

*** No Dash Number required for standard seal material

* "-192" and "-236" compounds are not compatible with mineral-based greases or oils

†Kalrez seals available by special quotation

FLUID	HANSEN ELASTOMER
Air (to 200° F)	Standard
Air (above 200° F)	-143
Acetone	-192*
Acetylene	Standard
Alcohol, Ethyl	-192*
Alcohol, Methyl	Standard
Alkalies	-192*
Ammonia, Anhydrous	Standard
Ammonium Hydroxide	-192*
Aroclor	-143
Brake Fluid, Non-Petroleum Based	-192*
Butane	-146
Carbon Dioxide	Standard
Carbon Tetrachloride	-143
Cellulube	-192*
Creosote	Standard
Diesel Fuel	-146
Diester Lubricants	-143
Ethane	-146
Ethanol	-192*
Ethylene Glycol	-192*
Freon (most varieties)	-118
Gasoline, Aromatic & Non-Aromatic	-143
Glycerin	Standard
Helium	Standard
Heptane	-146
Hexane	-146
Houghto-Safe Series 200, 600, 5000	Standard
Houghto-Safe Series 1000	-192*
Hydraulic Fluid, Petroleum-based with	Standard
Aniline Point above 160° F	
Hydrolube	Standard
Jet Fuel (to 250° F)	-146
Jet Fuel (above 250° F)	-143

FLUID	HANSEN ELASTOMER
Kerosene	-146
Lindol	-192*
L.P. Gases	Standard
Methane	-146
Methanol	Standard
Methyl Ethyl Ketone	-192*
Methyl Iso-Butyl Ketone	-192*
MIL-H-5606A	Standard
Mineral Spirits	-146
Natural Gas	Standard
Nitrogen	Standard
Octane	-143
Oils, including: Animal, Mineral with Aniline	Standard
Point above 160°F	
and Non-Food Service Vegetable	
OS45 & OS45-1	-143
Oxygen	Service Conditions Dictate Elastomer Selection
Pentane	-146
Perchloroethylene	-143
Propane	Standard
Propylene	-143
Pydraul	-143
Steam (to 350° F)	-192*
Steam (above 350° F)	-236*
Stoddard Solvent	-146
Toluene	-143
Transmission Oil, Automotive	Standard
Trichloroethylene	-143
Turpentine	Standard
Versilube F-50	-192*
Water (to 180°F)	Standard
Water (above 180°F)	-192*

* "-192" and "-236" compounds are not compatible with mineral-based greases or oils

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Technical and Warranty Information

WARNING

- About Industry Interchanges...It is possible to connect two different manufacturers' parts together so that they will effect a seal and work properly in a fluid system. Tuthill Coupling Group cannot guarantee the quality, workmanship, dimensions, or tolerances of the other manufacturers' parts, even though they might be interchangeable. Therefore, whenever mixing parts, the final assembly severe personal injury or death.

Warranty

Every effort has been made to have all photographs and drawings accurately represent the products as they actually were at the time this catalog was printed. Obviously, however, so that we may effectively continue to meet the requirements of our users, changes in some items may have been made during the life of this catalog—which, on occasion, may be made without notice.

All Tuthill Coupling Group products are guaranteed, for a period of 90 days from the date of shipment to a customer, to be free of defects in material and workmanship. Any claimed defect must be reported to the Tuthill Coupling Group in writing within the warranty period. This warranty is limited to replacing or repairing, at the Company's option, f.o.b. the Company's factory, any part which upon Company inspection is found to be defective. Components purchased by the Company from others are warranted only to the extent of the guarantee or warranty, if any, made to the Company.

THE ABOVE WARRANTY COMPRISES THE COMPANY'S SOLE AND ENTIRE WARRANTY OBLIGATION AND LIABILITY IN CONNECTION WITH TUTHILL COUPLING GROUP HANSEN COUPLINGS. ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY EXCLUDED. THE COMPANY IN NO EVENT SHALL BE LIABLE FOR INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE SALE OR USE OF HANSEN COUPLINGS.

Pressure Ratings**

Since application conditions vary so widely, the pressures listed are intended as a guide only and not a guarantee of performance. Pressure peaks and extreme surge flows may cause a coupling to become inoperative.

SERVICE PRESSURE

Service pressure is the "rated pressure" as defined by ANSI/B93.2-1971, as "the qualified operating pressures which are recommended for a component or a system by the manufacturer."

**NOTE!

Pressure ratings listed were determined by testing threaded sockets and plugs. Sockets and plugs with hose stem and hose clamp end connections are designed and recommended for use with shop air line pressure only (150 psig maximum) when used with the appropriate style hose.

WARNING

Over-pressurization could result in a sudden failure of the coupling causing severe bodily injury or death. Be sure to select the proper coupling for your application and use it only within the specified service pressure range.

WARNING

Couplings do wear out. In order to avoid severe bodily injury or death, couplings must be routinely checked for condition and replaced if necessary.

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