FAIRFIELD COUPLERS

FAIRFIELD
QUICK RELEASE COUPLINGS 1/8" to 4"

Camlock Couplings 1/2" to 6"
in CS, Brass, SS 304, SS 316 and Aluminium
Pressure Rating 700 bar (10,000 psi)

COUPLER HANDLING PRECAUTIONS

1. Avoid connecting and disconnecting the coupler when pressure is applied to preclude possible accident.
   Connection and disconnection of TYPE-SC COUPLER is possible, however when pressure is applied.
2. Copuler has been designed to insure complete safety, however avoid subjecting it to shock.
   Handle with care when connecting and disconnecting in piping applications.
3. Remove foreign matter from the fluid with a filter beforehand.
   If foreign matter is mixed in the fluid, operation of the internal valve will be adversely effected, causing leakage.
4. Do not weld the coupler directly to panels and fixtures. This damages the internal seal causing leakage and imperfect flow.
5. When disconnecting the coupler in dusty and sandy locations, always use the specified dust cap.
6. Never tap the valve section with a hammer, etc. to bleed residual pressure.

APPLICATION: For Leakproof Handling of PROCESS LINE, CHEMICALS, GASES, LIQUIDS, HYDRAULICS AND SERVICE LINES LIKE COMPRESSED AIR, STEAM WATER, VACCUM, BRINE, CHILLED WATER, NITROGEN, BREATHING AIR ETC.
IN CHEMICAL, REFINARIES, FERTILISER, ATOMIC POWER PUNTS, PHARMACEUTICAL, ENGG., MACHINE TOOL, AUTOMOBILE, PAINT, DYE-STUFF & VARNISH, PETROLEUM, FURNACES, TEXTILE MACHINES. REFRIGERATION INDUSTRIES

FAIRFIELD

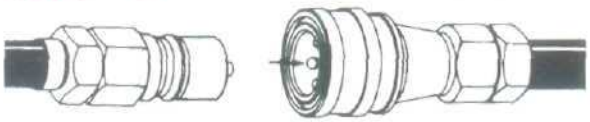
Type - DC Coupler

TYPE - DC DOUBLE CHECK VALVE (DOUBLE SHUT OFF) QUICK RELEASE COUPLINGS

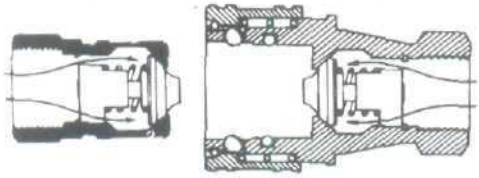
TYPE-DC COUPLERS ARE HAVING BUILT IN SELF SEALING VALVES ON PLUG & SOCKET ENDS SUCH THAT BOTH SOCKET AND PLUGS ARE SEALED INSTANTLY ON DISCONNECTION.

PLUG P

SOCKET S

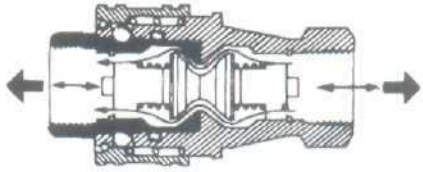


When plug and socket are seperated



The valve of the socket and plug is pushed against the valve seat and closed automatically.
There is no leakage of the fluid.

When plug and socket are connected



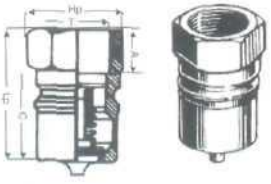
The valves of the socket and plug are pushed against each other, the interior of the coupling is opened, and the fluid flows. The O-ring inside the socket is forced against the outside of the plug and there is no leakage to the outside.

Features

- Since both the plug and socket have a value, there is no leakage of gas, oil etc. from either the socket or plug ends when disconnected.
- Since they are manufactured by an especially high precision machining process, air tightness is a high 10^{J} mmHgl/sec.
- The hose does not twist. • Designed for use in a wide range of appplications.

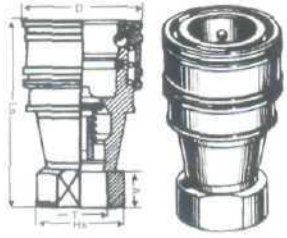
DIMENSIONS & WEIGHT TABLES

P



Model	Type	Size BSP/NPT	Max. Working Pressure PSI	DIMENSIONS (mm)					WEIGHT (g)		
				Lp	C	Hp	A	T	Steel	Brass	Stainless steel
1P	QRC-DC1	1/8"	4000	29	19	6Hex. 14X16.2	11	1/8-28PT	21	21	19
2P	QRC-DC2	1/4"	4000	36	22	6Hex. 17x19.6	13	1/4-19PT	35	38	35
3P	QRC-DC3	3/8"	4000	40	25	6Hex. 21x24.2	13	3/8-19PT	60	65	60
4P	QRC-DC4	1/2"	3500	44	28	6Hex. 29x33.3	15	1/2-14PT	123	134	124
6P	QRC-DC5	3/4"	3000	52	36	6Hex. 35x40.4	17	3/4-14PT	212	231	213
8P	QRC-DC6	1"	2500	62	40	6Hex. 41x47.4	20	1-11PT	350	381	352
10P	QRC-DC7	1 1/4"	2500	70	45	59Øx2Hex.54	24	1 1/4-11PT	592	645	596
12P	QRC-DC8	1 1/2"	2000	75	49	69Øx2Hex.63	24	1 1/2-11PT	889	968	895
16P	QRC-DC9	2"	1500	80	52	84Øx2Hex.77	27	2-11PT	1503	1637	1512

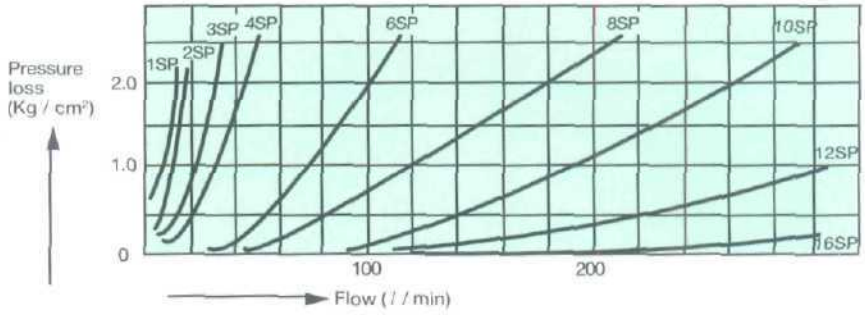
S



Model	Type	Size BSP/NPT	Max. Working Pressure PSI	DIMENSIONS (mm)					WEIGHT (g)		
				Ls	D	Hs	A	T	Steel	Brass	Stainless steel
1S	QRC-DC1	1/8"	4000	48	24	18Øx2Hex.14	11	1/8-28PT	85	93	86
2S	QRC-DC2	1/4"	4000	58	28	22Øx2Hex.19	13	1/4-19PT	133	145	134
3S	QRC-DC3	3/8"	4000	65	35	25Øx2Hex.21	13	3/8-19PT	208	227	209
4S	QRC-DC4	1/2"	3500	72	45	35Øx2Hex.29	15	1/2-14PT	428	466	431
6S	QRC-DC5	3/4"	3000	88	55	45Ø x2Hex.35	17	3/4-14PT	710	773	714
8S	QRC-DC6	1"	2500	102	65	48Øx2Hex.41	20	1-11PT	1000	1089	1006
10S	QRC-DC7	1 1/4"	2500	115	79	59Øx2Hex.54	24	1 1/4-11PT	1587	1728	1596
12S	QRC-DC8	1 1/2"	2000	124	89	69Øx2Hex.63	24	1 1/2-11PT	2330	2537	2345
16S	QRC-DC9	2"	1500	132	109	84Øx2Hex.77	27	2-11PT	3645	3969	3668

Fluid.....Operating oil
Temperature.....30°C ± 5°C

Flow-Pressure loss characteristic
Example:
for a flow of 100 Lit/Min using the 6SP, the intersection of the horizonatal axis flow at 100 Lit/Min. yieds the pressure loss value of 2 kg / cm²



FAIRFIELD

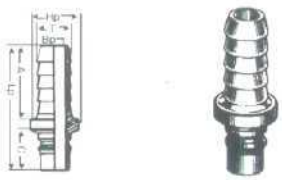
Type - SC Coupler

TYPE - SC SINGLE CHECK VALVE (ONE WAY SHUT OFF) QUICK RELEASE COUPLINGS

TYPE-SC is most popular type coupler used to connect air piping in factories and used to connect air tools with hoses etc. Both socket and plug have hose use and screw use advantages. There is also variety of other types. The types 20, 30, 40 and Types 400 and 600 are completely interchangeable. With one check valve built into the coupling only whereas plugs do not have any check valves. Can be advantageously used where one side of the flow system needs to be sealed on disconnection.

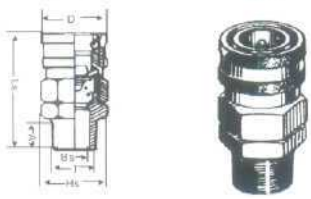
DIMENSIONS & WEIGHT TABLES

PH



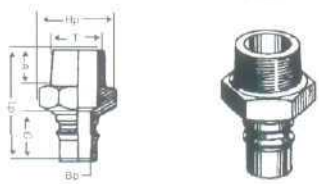
Model	Lp	C	HpØ	A	TØ	BpØ	Steel	Brass
20 PH	57	20	16	30	9	7.5	28	30
30 PH	61	20	16	34	11.3	7.5	31	34
40 PH	65	20	20	38	15	7.5	53	58
400 PH	66	23	22	36	15	13	66	72
600 PH	77	23	30	45	21	13	121	132

SM



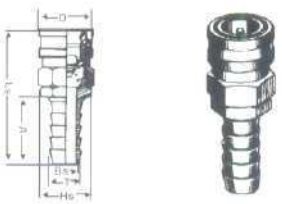
Model	Ls	DØ	Hs	A	T	BsØ	Steel	Brass
20 SM	55.5	25.4	6Hex.19x21.9	13	1/4-19PT	7	95	103
30 SM	56.5	25.4	6Hex.21x24.2	14	3/8-19PT	8	109	119
40 SM	59.5	25.4	6Hex.23x26.6	16	1/2-14PT	13	116	126
400 SM	63	35	6Hex.29x33.3	16	1/2-14PT	13	213	232
600 SM	67	35	6Hex.32x37	18	3/4-14PT	19	260	283

PM



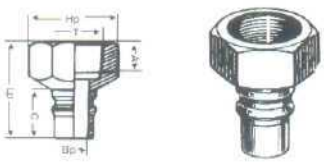
Model	Lp	C	Hp	A	T	BpØ	Steel	Brass
20 PM	41	20	6Hex.14x16.2	13	1/4-19PT	7.5	26	28
30 PM	42	20	6Hex.19x21.9	14	3/8-19PT	7.5	46	50
40 PM	46	20	6Hex.23x26.6	16	1/2-14PT	7.5	61	66
400 PM	50	23	6Hex.23x26.6	16	1/2-14PT	13	71	77
600 PM	55	23	6Hex.32x37	18	3/4-14PT	13	116	126

SH



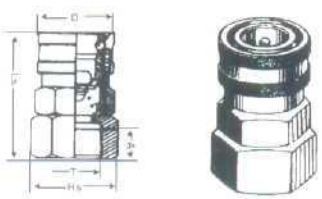
	Dimensions (mm)						Weight (g)	
Model	Ls	DØ	Hs	A	TØ	BsØ	Steel	Brass
20 SH	72.5	25.4	6Hex.18x21.9	30	9	5	98	107
30 SH	76.5	25.4	6Hex.19x21.9	34	11.3	7.5	102	111
40 SH	80.5	25.4	6Hex.21x24.2	38	15	9	117	124
400 SH	83	35	6Hex.29x33.3	36	15	9	220	240
600 SH	92	35	6Hex.32x37	45	21	14	251	273

PF



Model	Lp	C	Hp	A	T	BpØ	Steel	Brass
20 PF	36	20	6Hex.17x19.6	13	1/4-19PT	7.5	28	30
30 PF	37	20	6Hex.21x24.2	14	3/8-19PT	7.5	38	41
40 PF	38	20	6Hex.29x33.3	15	1/2-14PT	7.5	71	77
400 PF	41	23	6Hex.29x33.3	15	1/2-14PT	13	82	89
600 PF	45	23	6Hex.35x40.4	17	3/4-14PT	13	116	126

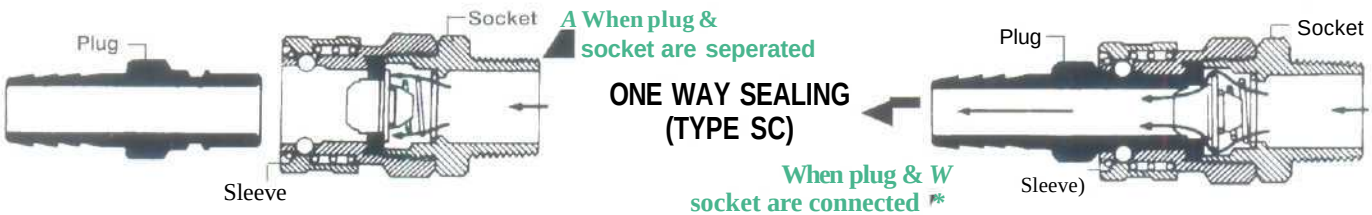
SF



Model	Ls	DØ	Hs	A	T	Steel	Brass
20 SF	49.5	25.4	6Hex.19x21.9	13	1/4-19PT	95	103
30 SF	50.5	25.4	6Hex.21x24.2	14	3/8-19PT	96	105
40 SF	52.5	25.4	6Hex.29x33.3	15	1/2-14PT	137	149
400 SF	57	35	6Hex.29x33.3	15	1/2-14PT	216	235
600 SF	61	35	6Hex.35x40.4	17	3/4-14PT	260	283

Features

- Successfully connected - disconnected 1,00,000 times in test.
- Temperature for extremaly high wear resistance.
- Twisting of the hose is automically corrected by a bearing when connected.
- Valve at the socket side is automatically opened and closed by the disconnection and connection operation.



When the outside sleeve at the socket side is pulled back, the plug and socket are seperated and the valve at the socket side is automatically closed so that the fluid does not flow outside.

When the outside sleeve at the socket side is pulled back and the socket is fitted to the plug, the valve at the socket side is automatically opened and the fluid flows.

Handling Precautions

1) Always insure the direction of fluid flow is from the socket side (valve) to the plug side.

2) When used with Jet Chisel or other vibrating tools, connect a rubber hose about 30cm long between the tool and the coupler.

FAIRFIELD

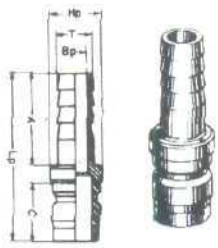
Type - ST Coupler

TYPE - ST, STRAIGHT THROUGH QUICK RELEASE COUPLINGS

This is a double path open type coupler which does not have a valve mechanism at either the socket nor the plug, it is used in piping system in which blocking of the fluid when disconnected is unnecessary and closure of lines is achieved by back up valves. Permitfull flow capability due to their smooth and accurately finished bores.

DIMENSIONS & WEIGHT TABLES

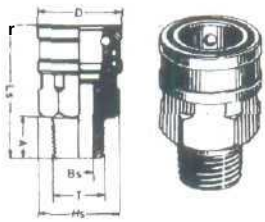
TPH



Model	Lp	C	HpØ	A	TØ	Bp	Steel	Brass	Stainless Steel
1TPH	41	15.5	12	20	6.5	3			
2TPH	53	18	14	29	8	5	21	23	21
3TPH	60	21	18	32	11	7	38	41	38
4TPH	70	24	22	39	15	10	71	77	71
6TPH	84	28	28	48	21	15	134	146	135
8TPH	105	36	42	57	27	19	327	356	329
10TPH	121	39	48	70	34.5	26			
12TPH	132	45	55	75	41	32			
16TPH	142	51	70	80	54	40			

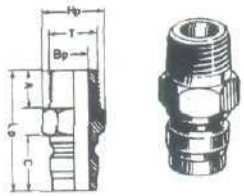
Feature
Since the pressure loss is small, it is ideal for High viscosity fluids. Hose use (male screw, female screw) and a variety of other types are available

TSM



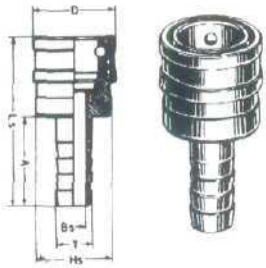
Model	Ls	DØ	HsØ	A	T	BsØ	Steel	Brass	Stainless Steel
1TSM	30	17.5	6Hex.14X16.2	9	1/8-28PT	4.5			
2TSM	42	24	6Hex.19X21.9	13	1/4-19PT	7	66	72	67
3TSM	46	28	6Hex.23X26.6	13	3/8-19PT	10	99	108	100
4TSM	56	35	6Hex.29X33.5	17	1/2-14PT	13	178	194	179
6TSM	65	45	6Hex.38X43.9	19	3/4-14PT	18	343	374	346
8TSM	76	58	6Hex.50X57.7	22	1-11PT	24	629	685	633
10TSM	86	69	62 X2HeX.54	25	1 1/4-11PT	32			
12TSM	95	76	66 X2Hex.58	25	1 1/2-11PT	38			
16TSM	108	95	82 X2Hex.77	29	2-11PT	49			

TPM



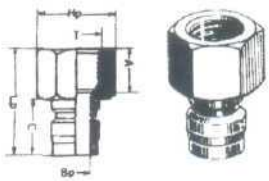
Model	Lp	C	Hp	A	T	BpØ	Steel	Brass	Stainless Steel
1TPM	32	15.5	6Hex.12X13.8	9	1/8-28PT	4.5			
2TPM	38	18	6Hex.17X19.6	13	1/4-19PT	6.5	30	33	30
3TPM	43	21	6Hex.19X21.9	13	3/8-19PT	10	41	45	42
4TPM	52	24	6Hex.23X26.6	17	1/2-14PT	13	81	88	81
6TPM	59	28	6Hex.32X37	19	3/4-14PT	17	164	179	165
8TPM	73	36	6Hex.41X47.3	22	1-11PT	24	273	297	274
10TPM	83	39	59Ø X2HeX.54	23	1 1/4-11PT	32			
12TPM	93	45	64ØX2Hex.58	26	1 1/2-11PT	38			
16TPM	102	51	82Ø X2Hex.77	27	2-11PT	50			

TSH



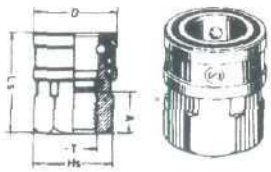
Model	Dimensions (mm)						Weight (g)		
	Ls	DØ	HsØ	A	TØ	BsØ	Steel	Brass	Stainless Steel
1TST	40	17.5	17	20	6.5	3			
2TST	55	24	22	29	8	5	63	69	64
3TST	62	28	25	32	11	7	95	104	96
4TST	74	35	32	39	15	10	176	192	177
6TST	90	45	40	48	21	15	348	379	350
8TST	102	58	52	57	27	19	586	638	590

TPF



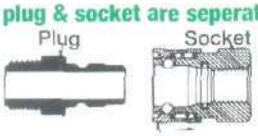
Model	Lp	C	Hp	A	T	BpØ	Steel	Brass	Stainless Steel
1TPF	26	15.5	6Hex.14X16.2	9	1/8-28PT	4.5			
2TPF	34	18	6Hex.17X19.6	13	1/4-19PT	6.5	28	31	29
3TPF	38	21	6Hex.21X24.2	13	3/8-19PT	10	43	47	43
4TPF	45	24	6Hex.29X33.5	17	1/2-14PT	13	103	113	104
6TPF	51	28	6Hex.35X40.4	19	3/4-14PT	17	166	181	167
8TPF	60	36	6Hex.41X47.3	22	1-11PT	26	321	350	323
10TPF	64	39	59Ø X2HeX.54	25	1 1/4-11PT	32	567	615	573
12TPF	75	45	62Ø X2Hex.58	25	1 1/2-11PT	38	703	762.5	706
16TPF	83	51	82Ø X2Hex.77	29	2-11PT	50	1226	1374	1303

TSF



Model	Ls	DØ	Hs	A	T	Steel	Brass	Stainless Steel
1TSF	25	17.5	6Hex.14X16.2	9	1/8-28PT			
2TSF	32	24	6Hex.19X21.9	13	1/4-19PT	57	62	57
3TSF	35	28	6Hex.23X26.6	13	3/8-19PT	83	90	83
4TSF	42	35	6Hex.29X33.5	17	1/2-14PT	153	167	154
6TSF	48	45	6Hex.38X43.9	19	3/4-14PT	288	314	289
8TSF	59	58	6Hex.50X57.7	22	1-11PT	557	607	561
10TSF	64	69	62ØX2HeX.54	23	1 1/4-11PT	821	888	815
12TSF	71	76	66Ø X2Hex.58	23	1 1/2-11PT	1003	1064	1003
16TSF	80	95	82Ø X2Hex.77	27	2-11PT	1726	1865	1732

When plug & socket are seperated



When plug & socket are connected

Since there is no valve mechanism, the fluid Hows smoothly without a pressure loss.

FAIRFIELD ENGINEERS

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