

## Couplings (Section VIII)

<u>Part No.</u>	<u>Description</u>	<u>Page No.</u>
	Cam & Groove Couplings	3-7
Part A	Adapter x Female NPT	3
Part B	Coupler x Male NPT	3
Part C	Coupler x Hose Shank	3
Part D	Coupler x Female NPT	4
Part E	Adapter x Hose Shank	4
Part F	Adapter x Male NPT	4
	Threaded Reducer/Increaser	4
Part DC	Dust Cap	5
Part DP	Dust Plug	5
Part CA	Coupler x Adapter	5
Part SA	Spool Adapter	6
Part CC	Spool Coupler	6
	Reducing Part A, Adapter x F NPT	6
	Reducing Part B, Coupler x M NPT	6
	Reducing Part C, Coupler x Hose Shank	7
	Reducing Part D, Coupler x F NPT	7
	Reducing Part E, Adapter x Hose Shank	7
	Reducing Part F, Adapter x M NPT	7
	Cam & Groove Accessories	8
HA	Cam & Groove Handle Assemblies	8
CG	Cam & Groove Gaskets	8
	Cam & Groove Elbow Couplings	9
	90° Adapter x F NPT	9
	90° Adapter x Hose Shank	9
	90° Adapter x M NPT	9
	90° Adapter x Coupler	9
	45° Adapter x Coupler	9
	90° Coupler x F NPT	9
	90° Coupler x Hose Shank	9
	90° Coupler x M NPT	9
	90° Coupler x Coupler	9
	45° Coupler x Coupler	9
	Coupler x TTMA Flange	10

## Couplings (Section VIII) - *continued*

<u>Part No.</u>	<u>Description</u>	<u>Page No.</u>
	Coupler x 150# Flange	10
	Adapter x TTMA Flange	10
	Adapter x 150# Flange	10
	Cam & Groove Couplings with Sight Flow Indicator	10
	TTMA Flange with Sight Flow Indicator	10
	Dry-Disconnect Couplings	11
DVR	Vapor Recovery Coupler	12
1004A	Fuel Tanker Bottom Loading/Unloading Adapter	12
KC	Combination Nipples	13
HM	Hose Menders	13
	Ground Joint Couplings	14
	Steam Quick Disconnect Couplings	14
7223	Universal Couplings	15
	Sand Blast Couplings	16
251	Brass Long Shank Coupling	17
268-BR	Brass Short Shank Coupling	17
7335	M42 x 2mm Air Hose Coupling	18
200	Branch Piping Coupling	18
	Japanese Pneumatic Quick Coupling	19
	Industrial Quick-Connect Fittings for Air Service	20
QM	Quick Acting Couplings	21
7365	Two, Four & Six Bolt Clamps	22
301	T-Bolt Clamps	23
DBC	Double Bolt Clamps	24
SDBC	Spiral Double Bolt Clamps	24
WGCS & WGSS	Worm Gear Clamps	25
BV	Brass Ball Valves	26
SV	Stainless Steel Ball Valves	26
GV	Brass Gate Valves	26
	Flanged End Full Bore Butterfly Wafer Valve	27
	Valve Positioner	27
	Coupling Chemical Resistance Chart	28-30
	A - F	28
	F - R	29
	S - Z	30

## CAM & GROOVE COUPLINGS

### Operation of Cam & Groove

To connect simply slide the adapter into the coupler and with normal hand pressure, press the cam arms down. To uncouple lift the cam arms and remove the adapter. **Cam and groove couplers are also available with auto-locking and self-locking handles.**

**Part A - Adapter x Female NPT**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	7239-2002	7239-02	7239-4002	7239-3002	7239-1002
3/4"	7239-2031	7239-31	7239-4031	7239-3031	7239-1031
1"	7239-2033	7239-33	7239-4033	7239-3033	7239-1033
1-1/4"	7239-2016	7239-16	7239-4016	7239-3016	7239-1016
1-1/2"	7239-2019	7239-19	7239-4019	7239-3019	7239-1019
2"	7239-2034	7239-34	7239-4034	7239-3034	7239-1034
2-1/2"	7239-2038	7239-38	7239-4038	7239-3038	7239-1038
3"	7239-2044	7239-44	7239-4044	7239-3044	7239-1044
4"	7239-2029	7239-29	7239-4029	7239-3029	7239-1029
6"	7239-2092	7239-92	7239-4092	--	7239-1092

**Part B - Coupler x Male NPT**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	7239-2006	7239-06	7239-4006	7239-3006	7239-1006
3/4"	7239-2005	7239-05	7239-4005	7239-3005	7239-1005
1"	7239-2010	7239-10	7239-4010	7239-3010	7239-1010
1-1/4"	7239-2013	7239-13	7239-4013	7239-3013	7239-1013
1-1/2"	7239-2020	7239-20	7239-4020	7239-3020	7239-1020
2"	7239-2035	7239-35	7239-4035	7239-3035	7239-1035
2-1/2"	7239-2039	7239-39	7239-4039	7239-3039	7239-1039
3"	7239-2045	7239-45	7239-4045	7239-3045	7239-1045
4"	7239-2030	7239-30	7239-4030	7239-3030	7239-1030
6"	7239-2095	7239-95	7239-4095	--	7239-1095

**Part C - Coupler x Hose Shank**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	7239-2096	7239-96	7239-4096	7239-3096	7239-1096
3/4"	7239-2007	7239-07	7239-4007	7239-3007	7239-1007
1"	7239-2012	7239-12	7239-4012	7239-3012	7239-1012
1-1/4"	7239-2024	7239-24	7239-4024	7239-3024	7239-1024
1-1/2"	7239-2017	7239-17	7239-4017	7239-3017	7239-1017
2"	7239-2027	7239-27	7239-4027	7239-3027	7239-1027
2-1/2"	7239-2023	7239-23	7239-4023	7239-3023	7239-1023
3"	7239-2054	7239-54	7239-4054	7239-3054	7239-1054
4"	7239-2050	7239-50	7239-4050	7239-3050	7239-1050
6"	7239-2090	7239-90	7239-4090	--	7239-1090

### CAM & GROOVE COUPLINGS

**Part D - Coupler x Female NPT**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	7239-2003	7239-03	7239-4003	7239-3003	7239-1003
3/4"	7239-2008	7239-08	7239-4008	7239-3008	7239-1008
1"	7239-2009	7239-09	7239-4009	7239-3009	7239-1009
1-1/4"	7239-2014	7239-14	7239-4014	7239-3014	7239-1014
1-1/2"	7239-2022	7239-22	7239-4022	7239-3022	7239-1022
2"	7239-2036	7239-36	7239-4036	7239-3036	7239-1036
2-1/2"	7239-2041	7239-41	7239-4041	7239-3041	7239-1041
3"	7239-2046	7239-46	7239-4046	7239-3046	7239-1046
4"	7239-2048	7239-48	7239-4048	7239-3048	7239-1048
6"	7239-2099	7239-99	7239-4099	--	7239-1099

**Part E - Adapter x Hose Shank**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	7239-2001	7239-01	7239-4001	7239-3001	7239-1001
3/4"	7239-2086	7239-86	7239-4086	7239-3086	7239-1086
1"	7239-2011	7239-11	7239-4011	7239-3011	7239-1011
1-1/4"	7239-2025	7239-25	7239-4025	7239-3025	7239-1025
1-1/2"	7239-2021	7239-21	7239-4021	7239-3021	7239-1021
2"	7239-2026	7239-26	7239-4026	7239-3026	7239-1026
2-1/2"	7239-2042	7239-42	7239-4042	7239-3042	7239-1042
3"	7239-2056	7239-56	7239-4056	7239-3056	7239-1056
4"	7239-2049	7239-49	7239-4049	7239-3049	7239-1049
6"	7239-2102	7239-102	7239-4102	--	7239-1102

**Part F - Adapter x Male NPT**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	7239-2051	7239-51	7239-4051	7239-3051	7239-1051
3/4"	7239-2004	7239-04	7239-4004	7239-3004	7239-1004
1"	7239-2032	7239-32	7239-4032	7239-3032	7239-1032
1-1/4"	7239-2015	7239-15	7239-4015	7239-3015	7239-1015
1-1/2"	7239-2018	7239-18	7239-4018	7239-3018	7239-1018
2"	7239-2028	7239-28	7239-4028	7239-3028	7239-1028
2-1/2"	7239-2037	7239-37	7239-4037	7239-3037	7239-1037
3"	7239-2043	7239-43	7239-4043	7239-3043	7239-1043
4"	7239-2047	7239-47	7239-4047	7239-3047	7239-1047
6"	7239-2104	7239-104	7239-4104	--	7239-1104

**Threaded Reducer/Incraser**



Size & Thread	Aluminum Part #:	Brass Part #:
3" MNPT x 2" FNPT	3020AL	3020BR
4" MNPT x 3" FNPT	4030AL	4030BR
6" MNPT x 5" FNPT x 4" MNPT	6540AL	--

**CAM & GROOVE COUPLINGS**

**Part DC - Dust Cap**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	DCA-050	DCB-050	DCI-050	--	DCS-050
3/4"	DCA-075	DCB-075	DCI-075	DCP-075	DCS-075
1"	DCA-100	DCB-100	DCI-100	DCP-100	DCS-100
1-1/4"	DCA-125	DCB-125	DCI-125	--	DCS-125
1-1/2"	DCA-150	DCB-150	DCI-150	DCP-150	DCS-150
2"	DCA-200	DCB-200	DCI-200	DCP-200	DCS-200
2-1/2"	DCA-250	DCB-250	DCI-250	--	DCS-250
3"	DCA-300	DCB-300	DCI-300	DCP-300	DCS-300
4"	DCA-400	DCB-400	DCI-400	DCP-400	DCS-400
6"	DCA-600	DCB-600	DCI-600	--	DCS-600

**Part DP - Dust Plug**



Size	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Polypropylene Part #:	316SS Part #:
1/2"	DPA-050	DPB-050	DPI-050	--	DPS-050
3/4"	DPA-075	DPB-075	DPI-075	DPP-075	DPS-075
1"	DPA-100	DPB-100	DPI-100	DPP-100	DPS-100
1-1/4"	DPA-125	DPB-125	DPI-125	--	DPS-125
1-1/2"	DPA-150	DPB-150	DPI-150	DPP-150	DPS-150
2"	DPA-200	DPB-200	DPI-200	DPP-200	DPS-200
2-1/2"	DPA-250	DPB-250	DPI-250	--	DPS-250
3"	DPA-300	DPB-300	DPI-300	DPP-300	DPS-300
4"	DPA-400	DPB-400	DPI-400	DPP-400	DPS-400
6"	DPA-600	DPB-600	DPI-600	--	DPS-600

**Part CA - Coupler x Adapter**



Size Coupler x Adapter	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	316SS Part #:
1" C x 1-1/2" A	CAA-1015	CAB-1015	--	CAS-1015
1-1/2" C x 1" A	CAA-1510	CAB-1510	--	CAS-1510
1-1/2" C x 2" A	CAA-1520	CAB-1520	--	CAS-1520
1-1/2" C x 4" A	CAA-1540	CAB-1540	--	CAS-1540
2" C x 1-1/2" A	CAA-2015	CAB-2015	CAI-2015	CAS-2015
2" C x 3" A	CAA-2030	CAB-2030	CAI-2030	CAS-2030
2-1/2" C x 2" A	CAA-2520	CAB-2520	--	--
2-1/2" C x 4" A	CAA-2540	CAB-2540	--	--
3" C x 1-1/2" A	CAA-3015	CAB-3015	CAI-3015	--
3" C x 2" A	CAA-3020	CAB-3020	CAI-3020	CAS-3020
3" C x 4" A	CAA-3040	CAB-3040	CAI-3040	CAS-3040
4" C x 2" A	CAA-4020	CAB-4020	CAI-4020	CAS-4020
4" C x 2-1/2" A	CAA-4025	CAB-4025	CAI-4025	--
4" C x 3" A	CAA-4030	CAB-4030	CAI-4030	CAS-4030
4" C x 6" A	CAA-4060	--	CAI-4060	CAS-4060
6" C x 4" A	CAA-6040	CAB-6040	CAI-6040	CAS-6040



**CAM & GROOVE COUPLINGS**

**Part SA - Spool Adapter**



Size Adapter x Adapter	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	316SS Part #:
1" x 1"	SAA-1010	SAB-1010	--	SAS-1010
1-1/2" x 1-1/2"	SAA-1515	SAB-1515	SAI-1515	SAS-1515
1-1/2" x 2"	SAA-1520	SAB-1520	SAI-1520	SAS-1520
1-1/2" x 4"	--	SAB-1540	--	--
2" x 2"	SAA-2020	SAB-2020	SAI-2020	SAS-2020
2" x 2-1/2"	SAA-2025	SAB-2025	--	SAS-2025
2" x 3"	SAA-2030	SAB-2030	SAI-2030	SAS-2030
2-1/2" x 2-1/2"	SAA-2525	SAB-2525	--	SAS-2525
2-1/2" x 3"	SAA-2530	SAB-2530	SAI-2530	--
3" x 3"	SAA-3030	SAB-3030	SAI-3030	SAS-3030
3" x 4"	SAA-3040	SAB-3040	SAI-3040	SAS-3040
4" x 2"	SAA-4020	SAB-4020	--	--
4" x 4"	SAA-4040	SAB-4040	SAI-4040	SAS-4040
6" x 4"	SAA-6040	SAB-6040	--	--
6" x 6"	SAA-6060	SAB-6060	--	SAS-6060

**Part CC - Spool Coupler**



Size Coupler x Coupler	Aluminum Part #:	Brass Part #:	316SS Part #:
1-1/2" C x 1-1/2" C	CCA-150	--	CCS-150
2" C x 2" C	CCA-200	CCB-200	CCS-200
2" C x 3" C	CCA-2030	--	CCS-2030
3" C x 3" C	CCA-300	CCB-300	CCS-300
3" C x 4" C	CCA-3040	--	CCS-3040
4" C x 4" C	CCA-400	CCB-400	CCS-400
4" C x 6" C	CCA-4060	--	--
6" C x 6" C	CCA-600	--	CAS-6040

**Reducing Part A - Adapter x F NPT**



Size Adapter x F NPT	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	316SS Part #:
1-1/2" x 1"	--	--	--	AS-1510
1-1/2" x 2"	AA-1520	AB-1520	--	AS-1520
2" x 1-1/2"	AA-2015	AB-2015	--	AS-2015
2" x 2-1/2"	AA-2025	AB-2025	--	AS-2025
2" x 3"	AA-2030	AB-2030	AI-2030	AS-2030
2-1/2" x 3"	AA-2530	AB-2530	--	AS-2530
3" x 2"	AA-3020	AB-3020	AI-3020	AS-3020
3" x 4"	AA-3040	AB-3040	AI-3040	AS-3040
4" x 3"	AA-4030	AB-4030	AI-4030	AS-4030

**Reducing Part B - Coupler x M NPT**



Size Adapter x F NPT	Aluminum Part #:	Brass Part #:	316SS Part #:
1" x 2"	BA-1020	--	--
1-1/2" x 1"	BA-1510	--	BS-1510
2" x 1-1/2"	BA-2015	--	BS-2015
2" x 3"	BA-2030	--	--
2-1/2" x 3"	BA-2530	--	--
3" x 2"	BA-3020	BB-3020	BS-3020
3" x 4"	BA-3040	--	--
4" x 2"	BA-4020	--	--
4" x 3"	BA-4030	BB-4030	BS-4030

**CAM & GROOVE COUPLINGS**

**Reducing Part C - Coupler x Shank**



Size Coupler x Shank	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	316SS Part #:
1-1/2" x 1"	--	CB-1510	--	--
1-1/2" x 2"	CA-1520	CB-1520	--	--
2" x 1-1/2"	CA-2015	CB-2015	--	CS-2015
2" x 3"	CA-2030	--	--	--
3" x 2"	CA-3020	CB-3020	CI-3020	CS-3020
3" x 4"	CA-3040	CB-3040	--	CS-3040
4" x 2"	CA-4020	--	CI-4020	--
4" x 3"	CA-4030	CB-4030	CI-4030	CS-4030

**Reducing Part D - Coupler x F NPT**



Size Coupler x F NPT	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	316SS Part #:
1-1/2" x 1"	DA-1510	--	--	DS-1510
2" x 1-1/2"	DA-2015	DB-2015	--	DS-2015
2-1/2" x 2"	DA-2520	--	--	--
3" x 2"	DA-3020	DB-3020	DI-3020	DS-3020
3" x 2-1/2"	DA-3025	--	--	--
4" x 3"	DA-4030	DB-4030	--	DS-4030

**Reducing Part E - Adapter x Shank**



Size Adapter x F NPT	Aluminum Part #:	Brass Part #:	316SS Part #:
2" x 1-1/2"	EA-2015	--	ES-2015
2" x 2-1/2"	EA-2025	EB-2025	--
3" x 2"	EA-3020	--	ES-3020
3" x 2-1/2"	EA-3025	EB-3025	ES-3025
4" x 3"	EA-4030	EB-4030	ES-4030

**Reducing Part F - Adapter x M NPT**



Size Coupler x Shank	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	316SS Part #:
1" x 2"	FA-1020	--	--	FS-1020
1-1/2" x 1"	FA-1510	FB-1510	--	--
1-1/2" x 2"	FA-1520	FB-1520	FI-1520	FS-1520
2" x 1-1/2"	FA-2015	FB-2015	FI-2015	FS-2015
2" x 3"	FA-2030	FB-2030	--	FS-2030
3" x 1-1/2"	FA-3015	FB-3015	--	FS-3015
3" x 2"	FA-3020	FB-3020	FI-3020	FS-3020
3" x 4"	FA-3040	FB-3040	--	FS-3040
4" x 2"	FA-4020	FB-4020	--	--
4" x 3"	FA-4030	FB-4030	FI-4030	FS-4030

## CAM & GROOVE ACCESSORIES

### No. HA - Cam & Groove Handle Assemblies



Size	Brass Part #:	316SS Part #:
1/2"	HA-B050	HA-S50
3/4"	HA-B075	HA-S75
1"	HA-B100	HA-S100
1-1/4" to 2-1/2"	HA-B125-250	HA-S125-250
3" - 5"	HA-B300-500	HA-S300-500
6"	HA-B600	HA-S600

### No. CG - Cam & Groove Gaskets



Size	Buna N	Viton	X-Thick Buna-N	PTFE Buna Filler	PTFE Viton Filler	EPR	Neoprene	Food Grade White Neo
1/2"	BCG-050	VCG-050	--	TBCG-050	TVCG-050	ECG-050	--	--
3/4"	BCG-075	VCG-075	--	TBCG-075	TVCG-075	ECG-075	NCG-075	--
1"	BCG-100	VCG-100	XCG-100	TBCG-100	TVCG-100	ECG-100	NCG-100	--
1-1/4"	BCG-125	VCG-125	XCG-125	TBCG-125	TVCG-125	ECG-125	NCG-125	--
1-1/2"	BCG-150	VCG-150	XCG-150	TBCG-150	TVCG-150	ECG-150	NCG-150	WNCG-150
2"	BCG-200	VCG-200	XCG-200	TBCG-200	TVCG-200	ECG-200	NCG-200	WNCG-200
2-1/2"	BCG-250	VCG-250	XCG-250	TBCG-250	TVCG-250	ECG-250	NCG-250	--
3"	BCG-300	VCG-300	XCG-300	TBCG-300	TVCG-300	ECG-300	NCG-300	WNCG-300
4"	BCG-400	VCG-400	XCG-400	TBCG-400	TVCG-400	ECG-400	NCG-400	WNCG-400
6"	BCG-600	VCG-600	--	TBCG-600	--	--	--	WNCG-600



**CAM & GROOVE ELBOW COUPLINGS**

**90° Adapter x F NPT**



Size	Aluminum Part #:	316SS Part #:
1-1/2"	ALA-15	--
2"	ALA-20	ALS-20
3"	ALA-30	ALS-30
4"	ALA-40	--

**90° Coupler x F NPT**



Size	Aluminum Part #:	316SS Part #:
1"	--	DLS-10
1-1/2"	DLA-15	--
2"	DLA-20	DLS-20
3"	DLA-30	DLS-30
4"	DLA-40	DLS-40
6"	DLA-60	DLS-60

**90° Adapter x Hose Shank**



Size	Aluminum Part #:	316SS Part #:
2"	ELA-20	ELS-20
3"	ELA-30	ELS-30
4"	ELA-40	ELS-40
6"	ELA-60	--

**90° Coupler x Hose Shank**



Size	Aluminum Part #:	316SS Part #:
1-1/2"	CLA-15	CLS-15
2"	CLA-20	CLS-20
3"	CLA-30	CLS-30
4"	CLA-40	CLS-40
6"	CLA-60	CLS-60

**90° Adapter x M NPT**



Size	Aluminum Part #:	316SS Part #:
1-1/2"	FLA-15	--
2"	FLA-20	FLS-20
3"	--	FLS-30

**90° Coupler x M NPT**



Size	Aluminum Part #:	316SS Part #:
1-1/2"	BLA-15	--
2"	BLA-20	BLS-20
3"	BLA-30	BLS-30

**90° Adapter x Coupler**



Size	Aluminum Part #:	316SS Part #:
1"	--	CALS-10
1-1/2"	CALA-15	CALS-15
2"	CALA-20	CALS-20
3"	CALA-30	CALS-30
4"	CALA-40	CALS-40
6"	CALA-60	CALS-60

**90° Coupler x Coupler**



Size	Aluminum Part #:	316SS Part #:
2"	CCLA-20	--
3"	CCLA-30	CCLS-30
4"	CCLA-40	--
6"	CCLA-60	--

**45° Adapter x Coupler**



Size	Aluminum Part #:	316SS Part #:
2"	CA45A-20	CA45S-20
3"	CA45A-30	CA45S-30
4"	CA45A-40	CA45S-40
6"	CA45A-60	CA45S-60

**45° Coupler x Coupler**



Size	Aluminum Part #:	316SS Part #:
3"	CC45A-30	CC45S-30
4"	CC45A-40	--
6"	CC45A-60	--

## FLANGED CAM & GROOVE COUPLINGS

### TTMA (Round tank truck) flanges x Adapters & Couplers

Coupler x TTMA Flange



Size Coupler x TTMA	Aluminum Part #:
3"	TTFCA-30
3" x 4"	TTFCA-3040
4"	TTFCA-40
6"	TTFCA-60

Adapter x TTMA Flange



Size Adapter x TTMA	Aluminum Part #:	316SS Part #:
3"	TTFAA-30	TTFAS-30
3" x 4"	TTFAA-3040	--
4"	TTFAA-40	TTFAS-40
6"	TTFAA-60	--

### 150# ASA flanges x Adapters & Couplers

Coupler x 150# Flange



Size	Aluminum Part #:	316SS Part #:
1"	--	CPFS-10
1-1/2"	--	CPFS-15
2"	CPFA-20	CPFS-20
3"	CPFA-30	CPFS-30
4"	CPFA-40	CPFS-40
6"	CPFA-60	CPFS-60

Adapter x 150# Flange



Size	Aluminum Part #:	316SS Part #:
1"	--	APFS-10
1-1/2"	--	APFS-15
2"	APFA-20	APFS-20
3"	APFA-30	APFS-30
4"	APFA-40	APFS-40
6"	APFA-60	APFS-60

### Cam & groove couplings with sight flow indicators

Designed for dry bulk transfer hose. Includes aluminum bodies, buna seals, acrylic sight glasses, stainless steel hardware and bronze cam arms.



Size Coupler x Adapter	Aluminum Part #:
3" x 3"	CASG-300
3" x 4"	CASG-3040
4" x 3"	CASG-4030
4" x 4"	CASG-4030

Size Adapter x Adapter	Aluminum Part #:
3" x 3"	SAASG-300
3" x 4"	SAASG-3040
4" x 4"	SAASG-400

Size Coupler x Coupler	Aluminum Part #:
3" x 3"	CCASG-300
3" x 4"	CCASG-3040
4" x 4"	CCASG-400

### Tank truck flanged sight flow indicators

Designed to work with the tank truck flanged butterfly valve commonly found on gasoline trucks. Rated to 150 PSI.



Size	Aluminum Part #:
4"	TTF40WS

## DRY - DISCONNECT COUPLINGS and ADAPTERS

Dry-Disconnect couplings are used in the following industries: Petroleum, chemical, agricultural, transportation, marine operations, pharmaceuticals, tank farms and in-plant applications. These couplings are designed for quick and spill free connection and disconnection of hoses and pipelines. When you are moving fluids that are: expensive, hazardous to the environment, expensive to reprocess or dispose of, and prone to accident spillage/product then Dry disconnect couplings are a good solution to prevent problems. Principle of operation is identical for all sizes. To Open/Engage coupling and adapter push in and turn, it's coupled full flow. To Close/Disengage the coupling and adapter turn and pull, it's released with no spillage. These couplings are interchangeable with Avery Hardoll and Todo-matic.

**Coupler x Female NPT Dry Disconnect**



**Adapter x F NPT Dry Disconnect**



Female NPT Size	Coupler Part Numbers			Adapter Part Numbers		
	316SS Part #:	Brass Part #:	Aluminum Part #:	316SS Part #:	Brass Part #:	Aluminum Part #:
3/4"	DDC075SS	DDC075BR	DDC075AL	DDA075SS	DDA075BR	DDA075AL
1"	DDC100SS	DDC100BR	DDC100AL	DDA100SS	DDA100BR	DDA100AL
1-1/2"	DDC150SS	DDC150BR	DDC150AL	DDA150SS	DDA150BR	DDA150AL
2"	DDC200SS	DDC200BR	DDC200AL	DDA200SS	DDA200BR	DDA200AL
3"	DDC300SS	DDC300BR	DDC300AL	DDA300SS	DDA300BR	DDA300AL
4"	DDC400SS	DDC400BR	DDC400AL	DDA400SS	DDA400BR	DDA400AL

### Coupler Properties

- Viton seals
- Coupler has built-in swivel
- Stainless steel ball bearings
- Shaft journal in SS embedded in PTFE to eliminate seizure
- Riveted piston pin to minimize the risk for failure under extreme pressure conditions
- Protecting ring is weather resistant rubber.
- Electrically conductive
- All wetted parts are stainless steel
- Rollers for the stainless steel couplings are hastelloy C276 on the stainless steel shaft
- Aluminum-Bronze on the stainless steel shaft
- Composite dust plugs are available for couplers

### Adapter Properties

- Viton seals
- Typically installed on the tank or manifold
- Available in female NPT or 150lb. ASA flange
- Conical valve seat to eliminate the risk for "piston blow out"
- PTFE bearing between the piston shaft and the piston guide to eliminate the risk for seizure
- Aluminum adapter has Aluminum poppet, with Stainless Steel internal parts
- Stainless Steel adapter has Stainless Steel poppet, with Stainless Steel internal parts
- Brass / Gunmetal adapter has Brass poppet, with Brass and Stainless Steel internal parts
- Composite dust caps are available for adapters

### No. DVR - VAPOR RECOVERY COUPLERS

Vapor recovery coupler with probe is available in hose shank, adapter and female NPT. Cast aluminum body, bronze arms with stainless steel pins and finger rings with Buna-N gasket.

**Also available with a Viton O-Ring poppet seal, this must be specified when ordering.**



Size	Part #:	Description (Coupler x Shank)
4x3	4030-DVR-AL	4" Coupler with Probe x 3" Hose Shank
4"	400-DVR-AL	4" Coupler with Probe x 4" Hose Shank

Size	Part #:	Description (Coupler x Adapter)
4x3	4030-DAVR-AL	4" Coupler with Probe x 3" Adapter

Size	Part #:	Description (Coupler x Female NPT)
4x3	4030-DVR-AL	4" Coupler with Probe x 3" Female NPT
4"	400-DVR-AL	4" Coupler with Probe x 4" Female NPT

### No. 1004A - Fuel Tanker API, Bottom Loading/Unloading Adapter



4" Adapter Openable - Bottom Loading  
 Two pieces heat-treated aluminum construction with a hard coated rotatable adapter. One-piece heavy-duty poppet and stainless steel trim for longer life. Multi-position short stroke aluminum handle with smooth rotation of less than 60°. Meets API RP-1004 specifications with a standard 4" TTMA flange. Viton\* seals.

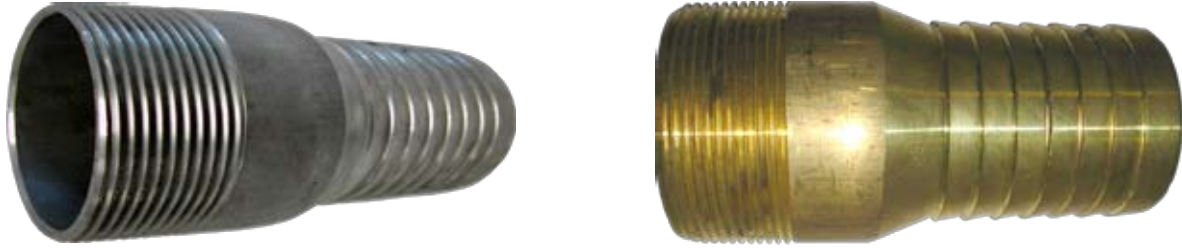
**Also available with Sight Glass, this must be specified when ordering.**



### No. KC - KING COMBINATION NIPPLES

King Combination Nipples, also known as KC Nipples, are a versatile means of transitioning from hose to pipe, adapters, valves or strainers. These end connections are for fluid service only. NPT male thread is standard. Also available with grooved end or with blank beveled end for welding. Plated steel prevents rust and weathering.

Available in Plated, Unplated, and Stainless Steel, Brass, Aluminum, Nylon, & Polypropylene



Size	Unplated Steel Part #:	Plated Steel Part #:	316SS Part #:	Brass Part #:	Aluminum Part #:
1/2"	KCU-050	KCP-050	KCS-050	KCB-050	KCA-050
3/4"	KCU-075	KCP-075	KCS-075	KCB-075	KCA-075
1"	KCU-100	KCP-100	KCS-100	KCB-100	KCA-100
1-1/4"	KCU-125	KCP-125	KCS-125	KCB-125	KCA-125
1-1/2"	KCU-150	KCP-150	KCS-150	KCB-150	KCA-150
2"	KCU-200	KCP-200	KCS-200	KCB-200	KCA-200
2-1/2"	KCU-250	KCP-250	KCS-250	KCB-250	KCA-250
3"	KCU-300	KCP-300	KCS-300	KCB-300	KCA-300
4"	KCU-400	KCP-400	KCS-400	KCB-400	KCA-400
6"	KCU-600	KCP-600	KCS-600	KCB-600	KCA-600

### No. HM - HOSE MENDERS

The working pressure of menders will vary with the size and construction of the hose, the type and number of clamps used, clamp placement, proper installation of clamps, temperature and product being conveyed.

\* **Note:** Also available with a ring.



Size	Plated Steel Part #:	316SS Part #:	Brass Part #:	Nyglass Part #:
1/4"	HMP-025	HMS-025	HMB-025	HMN-025
3/8"	HMP-375	HMS-375	HMB-375	HMN-375
1/2"	HMP-050	HMS-050	HMB-050	HMN-050
3/4"	HMP-075	HMS-075	HMB-075	HMN-075
1"	HMP-100	HMS-100	HMB-100	HMN-100
1-1/4"	HMP-125	HMS-125	--	HMN-125
1-1/2"	HMP-150	HMS-150	--	HMN-150
2"	HMP-200	HMS-200	--	HMN-200
2-1/2"	HMP-250	HMS-250	--	HMN-250
3"	HMP-300	HMS-300	--	HMN-300
4"	HMP-400	HMS-400	--	HMN-400
6"	HMP-600	HMS-600	--	HMN-600



**GROUND JOINT COUPLINGS**



Size	Stem, Wing Nut & Female Spud Part #:	Male Stem Part #:	Wing Nut Part #:	Female Spud Part #:	Male Spud Part #:	Double Spud Part #:	Washer Part #:
1/2"	GJS-050	GMS-050	GWN-050	GFS-050	MS-050	DS-050	GW-050
3/4"	GJS-075	GMS-075	GWN-075	GFS-075	MS-075	DS-075	GW-075
1"	GJS-100	GMS-100	GWN-100	GFS-100	MS-100	DS-100	GW-100
1-1/4"	GJS-125	GMS-125	GWN-125	GFS-125	MS-125	DS-125	GW-125
1-1/2"	GJS-150	GMS-150	GWN-150	GFS-150	MS-150	DS-150	GW-150
2"	GJS-200	GMS-200	GWN-200	GFS-200	MS-200	DS-200	GW-200
2-1/2"	GJS-250	GMS-250	GWN-250	GFS-250	MS-250	DS-250	GW-250
3"	GJS-300	GMS-300	GWN-300	GFS-300	MS-300	DS-300	GW-300
4"	GJS-400	GMS-400	GWN-400	GFS-400	***	***	GW-400

**STEAM QUICK DISCONNECT COUPLINGS**

Designed exclusively for steam applications, the Socket and Plug are solid brass with stainless steel springs and locking balls. The socket has a large plated steel sleeve especially designed for easier gripping with gloves. Two ethylene propylene O-rings in the Socket provide double protection against leaks. Rated to 100 PSI Gauge Saturated Steam (338°F).

**Coupler**

**Poppet Valve Plug**



Part Number	Body Size	Female NPT Size
SQD6-200S	1/4"	1/4"
SQD6-300S	3/8"	3/8"
SQD6-400S	1/2"	1/2"
SQD6-600S	3/4"	3/4"
SQD6-800S	1"	1"

Part Number	Body Size	Female NPT Size
SQD7-200S	1/4"	1/4"
SQD7-300S	3/8"	3/8"
SQD7-400S	1/2"	1/2"
SQD7-600S	3/4"	3/4"
SQD7-800S	1"	1"

**Note:** Ground joint couplings and the steam quick disconnects are the only couplings recommended for steam service.

**No. 7223 - UNIVERSAL COUPLINGS**

Universal coupling are for air and water service only.



Hose End

Size	Brass Part #:	Malleable Iron Part #:	316SS Part #:
3/8"	7223-02	7223-32	--
1/2"	7223-06	7223-36	7223-136
5/8"	7223-10	7223-40	--
3/4"	7223-12	7223-42	7223-142
1"	7223-16	7223-46	7223-146



Hose End

Size	Brass Part #:	Malleable Iron Part #:
1-1/4"	7223-20	7223-50
1-1/2"	7223-66	7223-56
2"	7223-24	7223-64



Female End

Size	Brass Part #:	Malleable Iron Part #:	316SS Part #:
1/4"	7223-01	7223-11	--
3/8"	7223-05	7223-35	7223-140
1/2"	7223-09	7223-39	7223-139
3/4"	7223-15	7223-45	7223-145
1"	7223-19	7223-49	7223-149



Female End

Size	Brass Part #:	Malleable Iron Part #:	316SS Part #:
1 1/4"	7223-23	7223-53	
1 1/2"	7223-29	7223-59	
2"	7223-28	7223-58	



Male End

Size	Brass Part #:	Malleable Iron Part #:	316SS Part #:
1/4"	7223-26	7223-76	--
3/8"	7223-04	7223-34	7223-137
1/2"	7223-08	7223-38	7223-138
3/4"	7223-14	7223-44	7223-144
1"	7223-18	7223-48	7223-148



Blank End

Brass Part #:	Malleable Iron Part #:	316SS Part #:
7223-21	7223-31	7223-131



Triple Connection

Brass Part #:	Malleable Iron Part #:	316SS Part #:
7223-TCB	7223-TCI	--



Gasket

Part #: CRG - Universal Coupling Gasket		
Two Lug		Four Lug
Rubber Part #:	Neoprene Part #:	Rubber Part #:
CRG-201	CRG-202	CRG-401

## SAND BLAST COUPLINGS

All sand blast couplings are supplied with screws and gaskets. Installation: 1) Ends of hose must be cut square to fit snug against metal end. 2) Holding hose tight to end of fitting, insert screws and turn in full putting screw 180° from first to insure best centering. 3) After all screws have been placed, check tube opposite screws to be sure screws have not penetrated completely through. 4) On quick couplings insert safety clips.



### Hose End x Crowfoot

These fittings are designed for use on sand blast hose.

Size	Hose OD	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Nyglass Part #:
3/4"	1-1/2"	ASB075	BSB075	CISB075	NSB075
1"	1-7/8"	ASB100	BSB100	CISB100	NSB100
1-1/4"	2-5/32"	ASB125	BSB125	CISB125	NSB125
1-1/2"	2-3/8"	ASB150	BSB150	CISB150	NSB150



### Hose End Nozzle Holder

These fittings are designed for use on sand blast hose. Nozzle holders have 1-1/4" NPSM thread

Size	Hose OD	Aluminum Part #:	Brass Part #:	Cast Iron Part #:	Nyglass Part #:
3/4"	1-1/2"	ANH075	BNH075	CINH075	NNH075
1"	1-7/8"	ANH100	BNH100	CINH100	NNH100
1-1/4"	2-5/32"	ANH125	BNH125	CINH125	NNH125
1-1/2"	2-3/8"	ANH150	BNH150	CINH150	NNH150



### Female NPT x Crowfoot

Threaded couplings/adapters x crowfoot.

NPT Size	Hose OD	Aluminum Part #:	Brass Part #:
1-1/4"	1-1/2"	ASC125	BSC125
1-1/2"	1-7/8"	ASC150	BSC150

No. SBG - SBR gaskets for all sand blast couplings.

No. SBCS - 10 x 5/8" Zinc plated phillips head screws for all sand blast couplings.

## BRASS MARINE & INDUSTRIAL FITTINGS

### No. 251 - Brass Long Shank Coupling

Long shank couplings are commonly used on low pressure air or steam hose. The long shanks accommodate two or more clamps for safe sealing of coupling to hose.



Part Number	Shank Size	Thread Size	Thread Type	Nut Type
251-1575NPT	1/2"	3/4"	NPT	Hex
251-1575GHT	1/2"	3/4"	GHT	Hex
251-5875NPT	5/8"	3/4"	NPT	Hex
251-5875GHT	5/8"	3/4"	GHT	Hex
251-075NPT	3/4"	3/4"	NPT	Hex
251-075GHT	3/4"	3/4"	GHT	Hex
251-075GHT	3/4"	3/4"	GHT	Hex
251-100NPT	1"	1"	NPT	Hex
251-125NPT	1-1/4"	1-1/4"	NPT	Hex
251-150NPT	1-1/2"	1-1/2"	NPT	Pin
251-150NST	1-1/2"	1-1/2"	NST	Hex, Pin
251-200NPT	2"	2"	NPT	Pin
251-250NST	2-1/2"	2-1/2"	NST	Hex

### No. 268-BR - Brass Short Shank Coupling

268-BR short shank couplings are cast of high grade red brass for maximum strength. Recommended when hose is used around salt water, in mines and when a non-sparking coupling is needed.

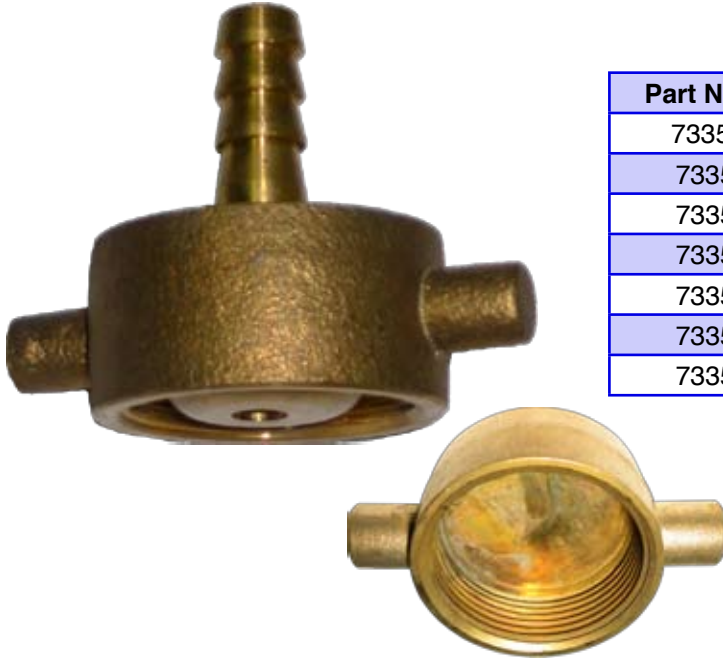
Also available with aluminum shank and brass nut, (PN: 268AL-).



Part Number	Shank Size	Thread Size	Thread Type	Nut Type	IMPA Code
268-1575NPT	1/2"	3/4"	NPT	Hex	--
268-1575GHT	1/2"	3/4"	GHT	Hex	--
268-5875NPT	5/8"	3/4"	NPT	Hex	--
268-5875GHT	5/8"	3/4"	GHT	Hex	--
268-075NPT	3/4"	3/4"	NPT	Hex	--
268-075GHT	3/4"	3/4"	GHT	Hex	--
268-075GHT	3/4"	3/4"	GHT	Hex	--
268-100NPT	1"	1"	NPT	Hex	--
268-125NPT	1-1/4"	1-1/4"	NPT	Hex	--
268-150NPT	1-1/2"	1-1/2"	NPT	Pin	330867
268-150NST	1-1/2"	1-1/2"	NST	Hex, Pin	330865
268-200NPT	2"	2"	NPT	Pin	--
268-250NST	2-1/2"	2-1/2"	NST	Pin	330866
268-300NPT	3"	3"	NPT	Pin	--
268-400NPT	4"	4"	NPT	Pin	--
268-600NPT	6"	6"	NPT	Pin	--

**No. 7335 - AIR HOSE COUPLING**

Female threaded pin lug connection for use with the ships male threaded air outlet M42 x 2 (JIS B 0207). The conical shaped insert provides a metal-to-metal mechanical seal.



Part Number	Shank Size	IMPA CODE
7335-HC	Hose Cap	
7335-15	6mm	351051
7335-35	9mm	351053
7335-45	12mm	351054
7335-55	15mm	351055
7335-65	19mm	351056
7335-75	25mm	351057

**No. 200 - BRANCH PIPING COUPLING**

These couplings are used for simultaneous connection of multiple hose to a single air supply source. Two types are available Line type (Type L), and Star type (Type S). Centralized piping can be set-up in any desired location. The branch inlet includes: 1 each of 400SH and 1 each 400 PM. The branch outlet includes the following: 4 each 20 SM and 1 each 40 SM. Available in chrome plated steel only.



Part Number	IMPA CODE
200L-L20/30A	351653_351654



Part Number	IMPA CODE
200A-S-20/30A	351651_351652



## JAPANESE PNEUMATIC QUICK COUPLINGS

Couplers shut off when disconnected.

Plug x M NPT



Part #:	IMPA code:	Body Size	NPT Thread
<b>Chrome plated steel</b>			
20PM-CH	351332	1/4"	1/4"
30PM-CH	351333	1/4"	3/8"
40PM-CH	351334	1/4"	1/2"
400PM-CH	351335	1/2"	1/2"
600PM-CH	351336	1/2"	3/4"
800PM-CH	351337	1/2"	1"
<b>Stainless steel</b>			
20PM-SS	351352	1/4"	1/4"
30PM-SS	351353	1/4"	3/8"
40PM-SS	351354	1/4"	1/2"
400PM-SS	351355	1/2"	1/2"
600PM-SS	351356	1/2"	3/4"
800PM-SS	351357	1/2"	1"

Coupler x M NPT



Part #:	IMPA code:	Body Size	NPT Thread
<b>Chrome plated steel</b>			
20SM-CH	351302	1/4"	1/4"
30SM-CH	351303	1/4"	3/8"
40SM-CH	351304	1/4"	1/2"
400SM-CH	351305	1/2"	1/2"
600SM-CH	351306	1/2"	3/4"
800SM-CH	351307	1/2"	1"
<b>Stainless steel</b>			
20SM-SS	351322	1/4"	1/4"
30SM-SS	351323	1/4"	3/8"
40SM-SS	351324	1/4"	1/2"
400SM-SS	351325	1/2"	1/2"
600SM-SS	351326	1/2"	3/4"
800SM-SS	351327	1/2"	1"

Plug x F NPT



Part #:	IMPA code:	Body Size	NPT Thread
<b>Chrome plated steel</b>			
20PF-CH	351431	1/4"	1/4"
30PF-CH	351432	1/4"	3/8"
40PF-CH	351433	1/4"	1/2"
400PF-CH	351434	1/2"	1/2"
600PF-CH	351435	1/2"	3/4"
800PF-CH	351436	1/2"	1"
<b>Stainless steel</b>			
20PF-SS	351451	1/4"	1/4"
30PF-SS	351452	1/4"	3/8"
40PF-SS	351453	1/4"	1/2"
400PF-SS	351454	1/2"	1/2"
600PF-SS	351455	1/2"	3/4"
800PF-SS	351456	1/2"	1"

Coupler x F NPT



Part #:	IMPA code:	Body Size	NPT Thread
<b>Chrome plated steel</b>			
20SF-CH	351401	1/4"	1/4"
30SF-CH	351402	1/4"	3/8"
40SF-CH	351403	1/4"	1/2"
400SF-CH	351404	1/2"	1/2"
600SF-CH	351405	1/2"	3/4"
800SF-CH	351406	1/2"	1"
<b>Stainless steel</b>			
20SF-SS	351421	1/4"	1/4"
30SF-SS	351422	1/4"	3/8"
40SF-SS	351423	1/4"	1/2"
400SF-SS	351424	1/2"	1/2"
600SF-SS	351425	1/2"	3/4"
800SF-SS	351426	1/2"	1"

Plug x Hose barb



Part #:	IMPA code:	Body Size	Hose ID
<b>Chrome plated steel</b>			
20PH-CH	351231	1/4"	1/4"
30PH-CH	351232	1/4"	3/8"
40PH-CH	351233	1/4"	1/2"
400PH-CH	351234	1/2"	1/2"
600PH-CH	351235	1/2"	3/4"
800PH-CH	351236	1/2"	1"
<b>Stainless steel</b>			
20PH-SS	351251	1/4"	1/4"
30PH-SS	351252	1/4"	3/8"
40PH-SS	351253	1/4"	1/2"
400PH-SS	351254	1/2"	1/2"
600PH-SS	351255	1/2"	3/4"
800PH-SS	351256	1/2"	1"

Coupler x Hose barb



Part #:	IMPA code:	Body Size	Hose ID
<b>Chrome plated steel</b>			
20SH-CH	351201	1/4"	1/4"
30SH-CH	351202	1/4"	3/8"
40SH-CH	351203	1/4"	1/2"
400SH-CH	351204	1/2"	1/2"
600SH-CH	351205	1/2"	3/4"
800SH-CH	351206	1/2"	1"
<b>Stainless steel</b>			
20SH-SS	351221	1/4"	1/4"
30SH-SS	351222	1/4"	3/8"
40SH-SS	351223	1/4"	1/2"
400SH-SS	351224	1/2"	1/2"
600SH-SS	351225	1/2"	3/4"
800SH-SS	351226	1/2"	1"

## INDUSTRIAL QUICK-CONNECT FITTINGS FOR AIR SERVICE

Industrial quick-connect fittings are designed to be interchangeable with fittings of other makes, steel, rated up to 300 PSI. Also available in brass and stainless steel.

### Plugs

### Semi-Automatic Couplers

Couplers shut off when disconnected.

Plug x M NPT



Part #:	Body Size	Inlet Size & Thread
20P20M	1/4"	1/4" M NPT
20P30M	1/4"	3/8" M NPT
30P20M	3/8"	1/4" M NPT
30P30M	3/8"	3/8" M NPT
30P40M	3/8"	1/2" M NPT
40P30M	1/2"	3/8" M NPT
40P40M	1/2"	1/2" M NPT
40P600M	1/2"	3/4" M NPT

Coupler x M NPT



Part #:	Body Size	Inlet Size & Thread
20C20M	1/4"	1/4" M NPT
20C30M	1/4"	3/8" M NPT
30C20M	3/8"	1/4" M NPT
30C30M	3/8"	3/8" M NPT
30C40M	3/8"	1/2" M NPT
40C30M	1/2"	3/8" M NPT
40C40M	1/2"	1/2" M NPT
40C600M	1/2"	3/4" M NPT

Plug x F NPT



Part #:	Body Size	Inlet Size & Thread
20P20F	1/4"	1/4" F NPT
20P30F	1/4"	3/8" F NPT
30P20F	3/8"	1/4" F NPT
30P30F	3/8"	3/8" F NPT
30P40F	3/8"	1/2" F NPT
40P30F	1/2"	3/8" F NPT
40P40F	1/2"	1/2" F NPT
40P600F	1/2"	3/4" F NPT

Coupler x F NPT



Part #:	Body Size	Inlet Size & Thread
20C20F	1/4"	1/4" F NPT
20C30F	1/4"	3/8" F NPT
30C20F	3/8"	1/4" F NPT
30C30F	3/8"	3/8" F NPT
30C40F	3/8"	1/2" F NPT
40C30F	1/2"	3/8" F NPT
40C40F	1/2"	1/2" F NPT
40C600F	1/2"	3/4" F NPT

Plug x Hose Barb



Part #:	Body Size	Inlet Size
20P20B	1/4"	1/4" Hose end
20P30B	1/4"	3/8" Hose end
30P20B	3/8"	1/4" Hose end
30P30B	3/8"	3/8" Hose end
30P40B	3/8"	1/2" Hose end
40P30B	1/2"	3/8" Hose end
40P40B	1/2"	1/2" Hose end
40P600B	1/2"	3/4" Hose end

Coupler x Hose Barb



Part #:	Body Size	Inlet Size
20C20B	1/4"	1/4" Hose end
20C30B	1/4"	3/8" Hose end
30C20B	3/8"	1/4" Hose end
30C30B	3/8"	3/8" Hose end
30C40B	3/8"	1/2" Hose end
40C30B	1/2"	3/8" Hose end
40C40B	1/2"	1/2" Hose end
40C600B	1/2"	3/4" Hose end

## No. QM - QUICK ACTING COUPLINGS

Industrial quick acting couplings require 5 PSI to get a positive seal and are rated up to 300 PSI. Available in plated steel, brass and stainless steel.

**Male Head x Hose End**



Size	Steel Part #:	Brass Part #:
3/8"	QM2	QB2
1/2"	QM3	QB3
3/4"	QM4	QB4

**Male Head x Male NPT End**



Size	Steel Part #:	Brass Part #:
3/8"	QM41	QB41
1/2"	QM42	QB42
3/4"	QM43	QB43

**Male Head x Female NPT End**



Size	Steel Part #:	Brass Part #:
3/8"	QM81	QB81
1/2"	QM82	QB82
3/4"	QM83	QB83

**Female Head x Hose End**



Size	Steel Part #:	Brass Part #:
3/8"	QM21	QB21
1/2"	QM22	QB22
3/4"	QM23	QB23

**Female Head x Male NPT End**



Size	Steel Part #:	Brass Part #:
3/8"	QM61	QB61
1/2"	QM62	QB62
3/4"	QM63	QB63

**Female Head x Female NPT End**



Size	Steel Part #:	Brass Part #:
3/8"	QM101	QB101
1/2"	QM102	QB102
3/4"	QM103	QB103

**Two Female Heads (Converter)**



Available only in steel.  
Steel Part #: YFB75

**Buna-N Gaskets**



Part #: QBM2

## No. 7365 - TWO, FOUR & SIX BOLT CLAMPS

For use with ground joint couplings, interlocking type inserts and universal couplings. \*\* Recommended torque rating in Ft./Lbs. (for malleable iron and stainless steel clamps only). Larger sizes are available upon request.

2-Bolt type



Hose I.D.	Min. Hose O.D.	Max. Hose O.D.	Malleable Iron No.	Brass No.	Stainless Steel No.	Torque
1/4"	9/16"	21/32"	7365-0630	--	--	6
3/8"	11/16"	7/8"	7365-0632	--	--	6
1/2"	13/16"	15/16"	7365-0649	--	--	6
1/2"	15/16"	1-1/16"	7365-0650	7365-0650B	7365-0650S	12
1/2"	1 1/16"	1-3/16"	7365-0651	--	--	12
3/4"	1-5/32"	1-9/32"	7265-0030	--	--	21
3/4"	1-3/16"	1-5/16"	7365-0652	7365-0652B	7365-0652S	21
3/4"	1-5/16"	1-1/2"	7365-0653	7365-0653B	7365-0653S	21
3/4"	1-1/2"	1-11/16"	7365-0654	--	--	21

4-Bolt type



1/2"	29/32"	1-1/32"	7365-0968	--	--	6
1"	1-13/32"	1-9/16"	7365-0822*	--	--	21
1"	1-17/32"	1-23/32"	7365-0812	7365-0812B	7365-0812S	21
1"	1-11/16"	1-15/16"	7365-0813	7365-0813B	7365-0813S	21
1"	1-15/16"	2-1/8"	7365-0824	--	--	21
1-1/4"	1-1/2"	1-25/32"	7365-0814	--	--	40
1-1/4"	1-11/16"	1-7/8"	7365-0815*	--	--	21
1-1/4"	1-25/32"	2-3/32"	7365-0825	--	--	40
1-1/4"	1-7/8"	2-1/16"	7365-0826*	--	--	21
1-1/4"	2-1/8"	2-3/8"	7365-0919	7365-0919B	7365-0919S	40
1-1/2"	1-13/16"	2"	7365-0816	--	--	40
1-1/2"	2"	2-7/32"	7365-0817	--	--	40
1-1/2"	2"	2-1/8"	7365-0212*	--	--	21
1-1/2"	2-1/16"	2-1/4"	7365-0225*	--	--	40
1-1/2"	2-3/16"	2-3/8"	7365-9924	7365-9924B	7365-9924S	40
1-1/2"	2-3/8"	2-9/16"	7365-0924	7365-0924B	7365-0924S	40
1-1/2"	2-9/16"	2-3/4"	7365-0925	--	--	40
2"	2-1/4"	2-1/2"	7365-0818*	--	--	40
2"	2-11/32"	2-17/32"	7365-9928	--	--	60
2"	2-1/2"	2-3/4"	7365-0819*	--	--	40
2"	2-1/2"	2-25/32"	7365-0929	7365-0929B	7365-0929S	60
2"	2-3/4"	3-1/16"	7365-0820*	7365-0820B	7365-0820B	60
2"	3-3/32"	3-7/16"	7365-0828	--	--	60
2-1/2"	3-1/16"	3-1/2"	7365-9359*	--	--	60
2-1/2"	3-3/32"	3-7/16"	7365-9934	--	--	60
2-1/2"	3-1/2"	3-15/16"	7365-0829	--	--	150
3"	3-1/2"	3-3/4"	7365-0375*	--	--	60
3"	3-1/2"	3-15/16"	7365-9935	--	--	150
3"	3-3/4"	4"	7365-0821*	--	--	150
3"	3-13/16"	4-1/16"	7365-0935	--	--	150
3"	4"	4-3/16"	7365-0830*	--	--	200
3"	4-1/16"	4-7/16"	7365-0939	--	--	200
3"	4-3/16"	4-1/2"	7365-9450*	--	--	200

4 gripping finger type



3 piece 6-bolt type





**T-BOLT CLAMPS**

**Note:** Also available in steel band and Zinc plated screw upon request.



Min. OD inches	Max. OD inches	Min. OD mm	Max. OD mm	SS Band & Zinc Screw/Nut PN:	All SS Part #:	Torque (Nm)	Pressure (Bar)
11/16"	3/4"	17	19	301901-2	--	7	50
3/4"	13/16"	19	21	301902-0	--	7	50
13/16"	29/32"	21	23	301903-9	--	7	48
29/32"	1"	23	25	301904-7	--	7	48
1"	1-1/16"	25	27	301905-5	--	7	45
1-1/16"	1-5/32"	27	29	301906-3	--	7	45
1-5/32"	1-7/32"	29	31	301907-1	301307-5	16	46
1-7/32"	1-5/16"	31	34	301908-0	301308-3	16	46
1-5/16"	1-7/16"	34	37	301909-8	301309-1	16	46
1-7/16"	1-9/16"	37	40	301910-0	301310-4	16	44
1-9/16"	1-11/16"	40	43	301911-9	301311-2	16	44
1-11/16"	1-27/32"	43	47	301912-7	301312-0	16	44
1-27/32"	2"	47	51	301913-5	301313-9	16	44
2"	2-5/32"	51	55	301914-3	301314-7	16	40
2-5/32"	2-5/16"	55	59	301915-1	301315-5	16	40
2-5/16"	2-15/32"	59	63	301916-0	301316-3	16	36
2-15/32"	2-11/16"	63	68	301917-8	301317-1	16	36
2-11/16"	2-7/8"	68	73	301918-6	301318-0	25	28
2-7/8"	3-3/32"	73	79	301919-4	301319-8	25	28
3-3/32"	3-5/16"	79	85	301920-7	301320-0	25	28
3-5/16"	3-9/16"	85	91	301921-5	301321-9	25	20
3-9/16"	3-13/16"	91	97	301922-3	301322-7	25	20
3-13/16"	4-3/32"	97	104	301923-1	301323-5	25	20
4-3/32"	4-3/8"	104	112	301924-0	301324-3	25	12
4-3/8"	4-3/4"	112	121	301925-8	301325-1	25	12
4-3/4"	5-1/8"	121	130	301926-6	301326-0	25	12
5-1/8"	5-1/2"	131	139	301927-4	--	50	9
5-1/2"	5-7/8"	140	148	301928-2	--	50	9
5-7/8"	6-3/8"	149	161	301929-0	--	50	9
6-3/8"	6-7/8"	162	174	301930-3	--	50	6
6-7/8"	7-3/8"	175	187	301931-1	--	50	6
7-3/8"	7-7/8"	188	200	301932-0	--	50	6
7-7/8"	8-3/8"	201	213	301933-8	--	50	3
8-3/8"	8-7/8"	214	226	301934-6	--	50	3
8-7/8"	9-3/8"	225	238	301935-4	--	50	3
9-3/8"	9-7/8"	238	251	301936-2	--	50	3



**No. DBC - DOUBLE BOLT CLAMPS**

A rugged plated malleable iron two-bolt clamp with machine bolts and hex nuts. Inner surface has dual gripping ridges. Bolt lugs are reinforced to prevent bending out of alignment.



Min. Hose O.D.	Max. Hose O.D.	Part #:
1-1/8"	1-3/16"	DBCJ48
1-3/16"	1-3/8"	DBCJ49
1-7/16"	1-17/32"	DBCJX49
1-5/8"	1-13/16"	DBC DL14
1-3/4"	2-3/64"	DBC DL20
2-7/64"	2-19/64"	DBC DL24
2-5/16"	2-5/8"	DBC DL32
2-1/2"	2-3/4"	DBC DL275
2-3/4"	3-1/16"	DBC DL306
3-1/16"	3-3/8"	DBC DL328
3-1/4"	3-1/2"	DBC DL350
3-1/2"	3-13/16"	DBC400
3-25/32"	4-1/16"	DBC431
4-1/32"	4-9/32"	DBC463

Min. Hose O.D.	Max. Hose O.D.	Part #:
4-1/4"	4-15/16"	DBC525
4-1/2"	5-1/4"	DBC550
5-1/8"	5-11/16"	DBC600
5-11/16"	5-15/16"	DBC639
5-15/16"	6-1/2"	DBC675
6-1/2"	7-9/16"	DBC769
7-9/16"	8-3/16"	DBC818
8-1/4"	8-7/8"	DBC875
8-15/16"	9-7/8"	DBC988
9-15/16"	11-3/8"	DBC1125
11-3/16"	13"	DBC1275
12-3/16"	14"	DBC1360
13-3/16"	15"	DBC1450
15-1/16"	17-1/2"	DBC1700

**No. SDBC - SPIRAL DOUBLE BOLT CLAMPS**

Spiral Double Bolt Clamps are recommended to be used with convoluted PVC hose, et al. Series "WG". For adequate holding power, a single clamp may be used on each end of 4" size. Two clamps are recommended for each end on sizes 6" ID hose and above.



Hose I.D.	Min. Hose O.D.	Max. Hose O.D.	Part #:
1-1/2"	1-23/32"	2-1/8"	SDBC-150
2"	2-9/32"	2-1/2"	SDBC-200
2-1/2"	2-23/32"	3-1/8"	SDBC-250
3"	3"	2-1/2"	SDBC-300
4"	4"	4-1/2"	SDBC-400
5"	5-3/32"	5-1/2"	SDBC-500
6"	6-1/4"	7"	SDBC-600
8"	8-1/2"	9-1/4"	SDBC-800
10"	10-5/8"	1-1/4"	SDBC-1000

**No. WGCS & WGSS - WORM GEAR CLAMPS**



**Note:** Also available in Zinc plated band and galvanized screw upon request.

5/16" Galvanized Screw 1/2" Stainless steel band Part #:	5/16" Stainless steel screw 1/2" Stainless steel band Part #:	Minimum Size Range	Maximum Size Range
WGCS-06	WGSS-06	3/8"	7/8"
WGCS-08	WGSS-08	7/16"	1"
WGCS-10	WGSS-10	9/16"	1-1/16"
WGCS-12	WGSS-12	9/16"	1-1/4"
WGCS-16	WGSS-16	11/16"	1-1/2"
WGCS-20	WGSS-20	3/4"	1-3/4"
WGCS-24	WGSS-24	1-1/16"	2"
WGCS-28	WGSS-28	1-5/16	2-1/4"
WGCS-32	WGSS-32	1-9/16"	2-1/2"
WGCS-36	WGSS-36	1-13/16"	2-3/4"
WGCS-40	WGSS-40	2-1/16"	3"
WGCS-44	WGSS-44	2-5/16"	3-1/4"
WGCS-48	WGSS-48	2-9/16"	3-1/2"
WGCS-52	WGSS-52	2-13/16"	3-3/4"
WGCS-56	WGSS-56	3-1/16"	4"
WGCS-60	WGSS-60	3-5/16"	4-1/4"
WGCS-64	WGSS-64	3-9/16"	4-1/2"
WGCS-72	WGSS-72	4-1/16"	5"
WGCS-80	WGSS-80	4-5/8"	5-1/2"
WGCS-88	WGSS-88	4-3/32"	6"
WGCS-96	WGSS-96	4-1/2"	6-1/2"
WGCS-104	WGSS-104	5"	7"
WGCS-128	WGSS-128	6-1/2"	8-1/2"
WGCS-152	WGSS-152	8"	10"
WGCS-188	WGSS-188	10-1/4"	12-1/4"
WGCS-200	WGSS-200	11"	13"
WGCS-212	WGSS-212	11-3/4"	13-3/4"
WGCS-224	WGSS-224	12-1/2"	14-1/2"
WGCS-248	WGSS-248	14 "	16"
WGCS-270	WGSS-270	15-3/8"	17-3/8"
WGCS-312	WGSS-312	18"	20"
WGCS-332	--	19-1/8"	21-1/4"
WGCS-390	--	22-7/8"	24-7/8"

### No. BV - BRASS BALL VALVES

These 2 piece ball valves are constructed of forged brass. Designed for commercial and industrial use on steam, water, oil or gas. The conventional port ball valve has excellent flow characteristics.

\* **Note:** Also available in UL Listed.



Brass Part #:	NPT Size	PSI Steam, Saturated	PSI Water, Oil, Gas-wog
BV-025	1/4"	125 PSI	400 PSI
BV-038	3/8"	125 PSI	400 PSI
BV-050	1/2"	125 PSI	400 PSI
BV-075	3/4"	125 PSI	400 PSI
BV-100	1"	125 PSI	400 PSI
BV-125	1-1/4"	125 PSI	400 PSI
BV-150	1-1/2"	125 PSI	400 PSI
BV-200	2"	125 PSI	400 PSI
BV-250	2-1/2"	125 PSI	400 PSI
BV-300	3"	125 PSI	400 PSI
BV-400	4"	125 PSI	400 PSI

### No. SV - STAINLESS STEEL BALL VALVES

These 1 piece ball valves are constructed of stainless steel. Designed for commercial and industrial use on water, oil or gas. The conventional port ball valve has excellent flow characteristics.



316SS Part #:	NPT Size	PSI Water, Oil, Gas-wog
SV-025	1/4"	1000 PSI
SV-038	3/8"	1000 PSI
SV-050	1/2"	1000 PSI
SV-075	3/4"	1000 PSI
SV-100	1"	1000 PSI
SV-125	1-1/4"	1000 PSI
SV-150	1-1/2"	1000 PSI
SV-200	2"	1000 PSI
SV-250	2-1/2"	1000 PSI
SV-300	3"	1000 PSI

### No. GV - BRASS GATE VALVES

These gate valves are constructed of heavy duty cast brass. Body and bonnet are connected with a tight metal to metal leak proof seat. It has a screwed bonnet, non-rising stem, solid wedge disc, and integral seats. Recommended for non-steam use in commercial and residential applications. May be repacked while in service under pressure.



Part #:	NPT Size	Water, Oil, Gas- WOG
GV-025	1/4"	150 PSI
GV-038	3/8"	150 PSI
GV-050	1/2"	150 PSI
GV-075	3/4"	150 PSI
GV-100	1"	150 PSI
GV-125	1 1/4"	150 PSI
GV-150	1 1/2"	150 PSI
GV-200	2"	150 PSI
GV-250	2 1/2"	150 PSI
GV-300	3"	150 PSI
GV-400	4"	150 PSI

**FLANGED END FULL BORE BUTTERFLY WAFER VALVE**



**VALVE POSITIONER**



## Coupling Resistance Chart

**Caution:** The following data has been compiled from generally available sources and should not be relied upon without consulting and following the specific recommendations of the manufacturer regarding particular coupling materials.

**Key:** 1 = Excellent; 2 = Good; 3 = Fair or Conditional; X = Not Satisfactory; -- = No rating or no data available

Chemical/Product Conveyed	Mall. Iron Steel	Brass	Bronze	Alumi-num	Glass	SS 410, 416, 430	SS 302, 303, 304, 308	316SS	Monel
Acetate, Solvents, Crude	--	3	--	--	--	2	1	1	2
Acetate, Solvents, Pure	--	1	1	1	--	1	1	1	1
Acetate Acid	X	X	X	2	1	X	2	2	2
Acetate Acid Vapors	X	X	--	3	--	X	2	2	2
Acetate Anhydride	X	X	--	2	--	X	2	2	2
Acetone	1	1	1	1	1	1	1	1	1
Acetylene	1	2	--	1	--	1	1	1	2
Alcohols	1	2	--	1	--	1	1	1	1
Aluminum Sulfate	X	3	3	3	1	X	3	2	2
Alums	X	3	2	3	1	X	3	2	2
Ammonia Gas	1	X	3	1	3	1	1	1	X
Ammonium Chloride	1	3	--	1	--	3	3	1	1
Ammonium Hydroxide	2	X	--	2	--	1	1	1	3
Ammonium Nitrate	1	X	--	2	--	1	1	1	3
Ammonium Phosphate (Ammoniacal)	--	X	--	--	--	1	1	1	2
Ammonium Phosphate (Neutral)	--	3	--	--	--	1	1	1	2
Ammonium Phosphate (Acid)	--	3	--	--	--	3	2	1	2
Ammonium Sulfate	1	3	--	--	--	2	1	1	2
Asphalt	1	2	--	--	--	2	1	1	1
Beer	2	2	1	1	--	X	1	1	1
Beet Sugar Liquors	1	2	--	1	--	2	1	1	1
Benzene, Benzol	1	1	1	1	1	1	1	1	1
Benzine (petroleum__naphtha	1	1	--	1	--	1	1	1	1
Borax	2	2	--	--	--	1	1	1	1
Boric Acid	X	3	--	1	--	3	2	1	1
Butane, Butylene	1	1	1	1	--	1	1	1	1
Butadiene	--	1	--	--	--	1	1	1	1
Calcium Bisulfate	--	X	--	--	--	X	2	1	X
Calcium Hypochlorite	3	3	3	X	3	X	3	2	3
Cane Sugar Liquors	1	2	--	1	--	2	1	1	1
Carbon Dioxide (Dry)	1	1	--	1	--	1	1	1	1
Carbon Dioxide (Wet & Aqueous Sol)	2	3	--	2	--	2	1	1	2
Carbon Disulfide	2	3	--	2	--	2	1	1	2
Carbon Tetrachloride	3	1	2	3	1	1	1	1	1
Chlorine (Dry)	2	2	2	1	2	2	2	2	1
Chlorine (Wet)	X	X	3	X	2	X	X	3	3
Chromic Acid	--	X	X	X	1	3	2	2	3
Citric Acid	X	3	--	1	--	3	X	1	2
Coke Oven Gas	1	3	--	2	--	1	1	1	2
Copper Sulfate	X	X	--	X	--	1	1	1	3
Core Oils	--	1	1	--	--	1	1	1	1
Cottonseed Oil	1	1	1	1	--	1	1	1	2
Creosote	2	3	--	1	--	1	1	1	1
Ethers	2	1	--	1	--	1	1	1	1
Ethylene Glycol	2	2	--	--	--	1	1	1	1
Ferric Chloride	X	X	X	X	1	X	X	X	X
Ferric Sulfate	X	X	--	X	--	1	1	1	3
Formaldehyde	2	2	--	2	--	1	1	1	1



## Coupling Resistance Chart

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**Key:** 1 = Excellent; 2 = Good; 3 = Fair or Conditional; X = Not Satisfactory; -- = No rating or no data available

Chemical/Product Conveyed	Mall. Iron Steel	Brass	Bronze	Alumi-num	Glass	SS 410, 416, 430	SS 302, 303, 304, 308	316SS	Monel
Formic Acid	X	2	--	X	--	X	2	1	2
Freon	3	1	1	1	--	1	1	1	1
Furfural	1	2	--	1	--	1	1	1	1
Gasoline (Sour)	3	3	--	3	--	3	1	1	X
Gasoline (Refined)	1	1	1	1	--	1	1	1	1
Gelatin	1	3	--	1	--	1	1	1	1
Glucose	1	1	--	1	--	1	1	1	1
Glue	1	3	--	1	--	1	1	1	1
Glycerine or Glycerol	1	2	--	1	--	1	1	1	1
Hydrochloric Acid	X	X	X	X	1	X	X	X	X
Hydrocyanic Acid	3	X	--	1	--	3	1	1	2
Hydrofluoric Acid	X	3	3	X	X	X	X	X	1
Hydrogen Fluoride	--	3	--	--	--	X	X	3	1
Hydrogen	1	1	--	1	--	1	1	1	1
Hydrogen Peroxide	X	X	--	1	--	1	2	1	2
Hydrogen Sulfide (Dry)	3	3	--	2	--	3	2	1	3
Hydrogen Sulfide (Wet)	3	3	--	2	--	3	2	1	3
Lacquers and Lacquer Solvents	3	2	--	1	--	1	1	1	1
Lactic Acid	X	--	--	3	--	--	3	2	1
Lime-Sulfur	2	X	--	--	--	2	1	1	2
Linseed Oil	1	1	--	1	--	--	1	1	
Magnesium Chloride	3	3	--	X	--	3	2	1	1
Magnesium Hydroxide	1	2	--	X	--	1	1	1	1
Magnesium Sulfate	2	2	--	3	--	1	1	1	1
Mercuric Chloride	3	X	--	X	--	X	X	3	X
Mercury	1	X	--	X	--	1	1	1	2
Milk	3	3	--	1	--	2	1	1	3
Molasses	2	X	--	2	--	2	1	1	1
Natural Gas	1	2	--	1	--	1	1	1	1
Nickel Chloride	--	X	--	X	--	X	3	2	2
Nickel Sulfate	--	3	--	X	--	3	2	1	1
Nitric Acid	X	X	X	3	1	2	2	2	X
Oleic Acid	2	3	--	1	--	2	2	1	1
Oxalic Acid	3	3	--	2	--	3	2	1	1
Oxygen	1	1	1	1	--	1	1	1	1
Palmitic Acid	1	3	--	1	--	2	2	1	1
Petroleum Oils (Sour)	--	3	--	--	--	3	1	1	X
Petroleum Oils (Refined)	1	1	1	1	--	1	1	1	1
Phosphoric Acid --25%	3	X	--	3	3	X	3	1	2
Phosphoric Acid --25%-50%	X	X	--	X	3	X	X	2	2
Phosphoric Acid --50%-85%	X	X	--	X	X	X	X	2	2
Picric Acid	3	X	--	3	--	2	1	1	X
Potassium Chloride	2	3	--	3	--	3	2	1	1
Potassium Hydroxide	3	X	--	X	--	1	1	1	1
Potassium Sulfate	2	2	--	1	--	1	1	1	1
Propane	1	1	--	--	--	1	1	1	1
Rosin (Dark)	1	2	--	1	--	1	1	1	1
Rosin (Light)	--	X	--	1	--	1	1	1	2

## Coupling Resistance Chart

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**Key:** 1 = Excellent; 2 = Good; 3 = Fair or Conditional; X = Not Satisfactory; -- = No rating or no data available

Chemical/Product Conveyed	Mall. Iron Steel	Brass	Bronze	Aluminum	Glass	SS 410, 416, 430	SS 302, 303, 304, 308	316SS	Monel
Shellac	--	2	--	2	--	1	1	1	1
Sludge Acid	--	X	--	--	--	X	X	3	2
Soda Ash (Sodium Carbonate)	1	2	--	X	--	1	1	1	1
Sodium Bicarbonate	3	1	--	X	--	1	1	1	1
Sodium Bisulfate	X	3	--	3	--	X	1	1	1
Sodium Chloride	2	3	2	X	1	3	2	1	1
Sodium Cyanide	2	X	--	X	--	1	1	1	1
Sodium Hydroxide	3	X	3	X	X	2	2	2	1
Sodium Hypochlorite	X	X	--	X	--	X	3	2	3
Sodium Metaphosphate	X	3	--	1	--	2	1	1	1
Sodium Nitrate	1	3	--	1	--	1	1	1	1
Sodium Perborate	3	3	--	1	--	1	1	1	1
Sodium Peroxide	3	3	--	1	--	1	1	1	1
Sodium Phosphate	--	--	--	--	--	--	--	--	--
(Alkaline)	--	3	--	--	--	1	1	1	1
(Neutral)	--	2	--	--	--	1	1	1	1
(Acid)	--	2	--	--	--	X	2	1	1
Sodium Silicate	1	3	--	X	--	1	1	1	1
Sodium Sulfate	1	2	--	3	--	1	1	1	1
Sodium Sulfide	1	X	--	--	--	1	1	1	2
Sodium Thiosulfate (Hypo)	3	X	--	X	--	1	1	1	2
Stearic Acid	3	3	--	3	--	2	2	1	1
Sulfate Liquors	--	X	--	--	--	1	1	1	2
Sulfur	2	X	--	2	--	2	2	1	3
Sulfur Chloride	X	X	--	--	--	X	3	2	2
Sulfur Dioxide (Dry)	2	1	--	1	--	1	1	1	1
Sulfur Dioxide (Wet)	--	X	--	--	--	X	2	1	X
Sulfuric Acid 10%	X	X	3	3	--	X	X	2	2
Sulfuric Acid 10-75%	X	X	X	X	--	X	X	X	2
Sulfuric Acid 75-95%	3	X	X	X	--	3	3	2	3
Sulfuric Acid 95%	2	X	X	--	--	2	2	2	X
Sulfurous Acid	X	X	--	X	--	X	3	2	X
Tannic Acid	3	3	1	X	--	--	1	1	1
Tar	1	2	--	1	--	2	1	1	1
Toluene, Toluol	1	1	--	1	--	1	1	1	1
Trichlorethylene	3	1	--	3	--	1	1	1	1
Turpentine	--	3	--	1	--	3	1	1	1
Varnish	2	2	--	--	--	1	1	1	1
Vegetable Oils	1	2	--	1	--	1	1	1	1
Vinegar	3	3	--	3	--	3	2	1	2
Water(Acid Mine Water)	3	X	--	3	--	2	1	1	3
Water (Fresh)	3	1	--	1	--	1	1	1	1
Water (Salt)	3	3	2	X	--	3	2	2	1
Whiskey	X	2	--	--	--	3	1	1	2
Wines	X	2	--	--	--	3	1	1	2
Xylene, Xylol	2	1	--	1	--	1	1	1	1
Zinc Chloride	X	X	--	X	--	3	2	1	1
Zinc Sulfate	3	3	--	3	--	3	2	1	1