





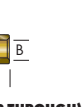


## MANIFOLD ACCESSORIES

Pipe Crosses, Female		PART NO.	REF A	REF B	REF C & D	REF E	CROSSES
		WHF-4-9	1/2" NPT	1/2" NPT	1/2" NPT	2-1/2"	Figure 1
		WHF-4-12	3/4" NPT	3/4" NPT	3/4" NPT	2-3/4"	Figure 1
		WHF-4-16	.843"-.847"	.843"-.847"	1/2" NPT	2-1/2"	Figure 2
		WHF-4-23	.843"-.847"	1/2" NPT	1/2" NPT	2-1/2"	Figure 3
<b>.843"-.847" = 1/2" Pipe Slip</b>							

PART NO.	REF A	REF B	REF C	REF E	TEES	Pipe Tees, Female	
WHF-4-7	1/2" NPT	1/2" NPT	1/2" NPT	2-1/2"	Figure 1		
WHF-4-10	3/4" NPT	3/4" NPT	3/4" NPT	2-3/4"	Figure 1		
WHF-4-14	.843"-.847"	.843"-.847"	1/2" NPT	2-1/2"	Figure 2		
WHF-4-18	1.053"-1.057"	1.053"-1.057"	3/4" NPT	2-3/4"	Figure 2		
WHF-4-13	1/2" NPT	1/2" NPT	.843"-.847"	2-1/2"	Figure 3		
WHF-4-21	.843"-.847"	1/2" NPT	1/2" NPT	2-3/4"	Figure 4		
WHF-4-22	1.053"-1.057"	3/4" NPT	3/4" NPT	2-1/2"	Figure 4		
WHF-4-1	1.053"-1.057"	1.053"-1.057"	1.053"-1.057"	2-3/4"	Figure 5		
<b>.843"-.847" = 1/2" Pipe Slip * 1.053"-1.057" = 3/4" Pipe Slip</b>							

**FEMALE NPT OUTLET ADAPTORS FOR MANIFOLD PIPELINE, BRASS & STAINLESS STEEL**  
 500 PSIG (3400 kPa)  
 3000 PSIG (20,700 kPa)  
 6000 PSIG (41,300 kPa)



415-1

416-1

PART NO.	GAS SERVICE	DESCRIPTION	MATERIAL
<b>CGA VALVE OUTLETS TO FEMALE PIPE THREADS</b>			
15-1	CGA-300	<b>Commercial Acetylene, to 500 PSIG:</b> RH Male .825"-14 NGO to 1/4" NPT Female	Brass
CO-2-1	CGA-320	<b>Carbon Dioxide, to 3000 PSIG:</b> RH Male .825"-14 NGO, to 1/4" NPT Female	Brass
1321-1	CGA-326	<b>Nitrous Oxide, to 3000 PSIG:</b> RH Male .825"-14 NGO to 1/4" NPT Female	Brass
1341-1	CGA-346	<b>Air, to 3000 PSIG:</b> RH Male .825"-14 NGO to 1/4" NPT Female	Brass
SS-1341-1	CGA-346	<b>Air, to 3000 PSIG:</b> RH Male .825"-14 NGO to 1/4" NPT Female	St. Steel
347-1	CGA-347	<b>Air, to 5500 PSIG:</b> RH Male .825"-14 NGO to 1/4" NPT Female	Brass
SS-347-1	CGA-347	<b>Air, from 3,001 to 5500 PSIG:</b> RH Male .825"-14 NGO to 1/4" NPT Female	St. Steel
800-1	CGA-350	<b>Hydrogen, Natural Gas, to 3000 PSIG:</b> LH Male .825"-14 NGO to 1/4" NPT Female	Brass
500-1	CGA-500	<b>Medical Mixtures, to 3000 PSIG:</b> RH Female .885"-14 NGO to 1/4" NPT Female	Brass
16-1	CGA-510	<b>POL Acetylene, Propane, to 500 PSIG:</b> LH Female .885"-14 NGO to 1/4" NPT Female	Brass
300-1	CGA-510	<b>POL Acetylene, Propane, to 500 PSIG:</b> 90° LH Female Nut .885"-14 NGO to 1/4" NPT Female	Brass
415-1	CGA-540	<b>Oxygen, to 3000 PSIG:</b> RH Male .903"-14 NGO to 1/4" NPT Female	Brass
SS-415-1	CGA-540	<b>Oxygen, to 3000 PSIG:</b> RH Male .903"-14 NGO to 1/4" NPT Female	St. Steel
414-1	CGA-555	<b>Butane, Propane Liquid, 3000 PSIG:</b> LH Male .903"-14 NGO to 1/4" NPT Female	Brass
416-1	CGA-580	<b>Argon, Helium, Nitrogen to 3000 PSIG:</b> RH Female .965"-14 NGO to 1/4" NPT Female	Brass
417-1	CGA-590	<b>Industrial Air, to 3000 PSIG:</b> LH Female .965"-14 NGO to 1/4" NPT Female	Brass
660-1	CGA-660	<b>Refrigerant Gases, to 3000 PSIG:</b> RH Male 1.030"-14 NGO to 1/4" NPT Female	Brass
SS-660-1	CGA-660	<b>Refrigerant Gases, to 3000 PSIG:</b> RH Male 1.030"-14 NGO to 1/4" NPT Female	St. Steel
SS-677-1	CGA-677	<b>Argon, Helium, Nitrogen from 5,501 to 7500 PSIG:</b> LH Male 1.030"-14 NGO to 1/4" NPT Female	St. Steel

## MANIFOLD ACCESSORIES

PART NO.		GAS SERVICE		DESCRIPTION	MATERIAL
<b>Medical Breathing Mix, to 3000 PSIG:</b>					
WMS-1-64	CGA-280	.745"-14 NGO, RH Male, Check Valve Outlet to 1/2" NPT			Brass
<b>Commercial Acetylene, to 500 PSIG:</b>					
B-10	CGA-300	.825"-14 NGO, RH Male to 1/4" NPT			Brass
B-12	CGA-300	.825"-14 NGO, RH Male to 1/2" NPT			Brass
B-13	CGA-300	.825"-14 NGO, RH Male to 3/4" NPT			Brass
<b>Carbon Dioxide, to 3000 PSIG:</b>					
B-20	CGA-320	.825"-14 NGO, RH Male to 1/4" NPT			Brass
B-21	CGA-320	.825"-14 NGO, RH Male to 3/8" NPT			Brass
B-22	CGA-320	.825"-14 NGO, RH Male to 1/2" NPT			Brass
B-23	CGA-320	.825"-14 NGO, RH Male to 3/4" NPT			Brass
<b>Nitrous Oxide, to 3000 PSIG:</b>					
B-1320	CGA-326	.825"-14 NGO, RH Male to 1/4" NPT			Brass
B-1321	CGA-326	.825"-14 NGO, RH Male to 3/8" NPT			Brass
B-1322	CGA-326	.825"-14 NGO, RH Male to 1/2" NPT			Brass
WMS-1-59	CGA-326	Check Valve Outlet to 1/2" NPT			Brass
<b>Air, to 3000 PSIG:</b>					
B-1340	CGA-346	.825"-14 NGO, RH Male to 1/4" NPT			Brass
B-1342	CGA-346	.825"-14 NGO, RH Male to 1/2" NPT			Brass
WMS-1-62	CGA-346	Check Valve Outlet to 1/2" NPT			Brass
B-1340SS	CGA-346	.825"-14 NGO, RH Male to 1/4" NPT			St. Steel
<b>Air, to 5500 PSIG:</b>					
B-348	CGA-347	.825"-14 NGO, RH Male to 1/2" NPT			Brass
<b>Hydrogen, Natural Gas, to 3000 PSIG:</b>					
B-30	CGA-350	.825"-14 NGO, LH Male to 1/4" NPT			Brass
B-32	CGA-350	.825"-14 NGO, LH Male to 1/2" NPT			Brass
B-33	CGA-350	.880"-14 NGO, LH Male to 3/4" NPT			Brass
<b>Acetylene, Butane, Propane, to 500 PSIG</b>					
B-40	CGA-510	.885"-14 NGO, LH Female to 1/4" NPT			Brass
B-42	CGA-510	.885"-14 NGO, LH Female to 1/2" NPT			Brass
B-43	CGA-510	.885"-14 NGO, LH Female to 3/4" NPT			Brass
<b>Oxygen, to 3000 PSIG:</b>					
B-50	CGA-540	.903"-14 NGO, RH Male to 1/4" NPT			Brass
B-51	CGA-540	.903"-14 NGO, RH Male to 3/8" NPT			Brass
B-52	CGA-540	.903"-14 NGO, RH Male to 1/2" NPT			Brass
WMS-1-53	CGA-540	Check Valve Outlet to 1/2" NPT			Brass
B-53	CGA-540	.903"-14 NGO, RH Male to 3/4" NPT			Brass
B-50SS	CGA-540	.903"-14 NGO, RH Male to 1/4" NPT			St. Steel
<b>Butane, Propane (Liq/W), to 3000 PSIG:</b>					
B-60	CGA-555	.903"-14 NGO, LH Male to 1/4" NPT			Brass
B-62	CGA-555	.903"-14 NGO, LH Male to 1/2" NPT			Brass

### MALE NPT OUTLET ADAPTORS FOR MANIFOLD PIPELINE, BRASS & STAINLESS STEEL

500 PSIG (3400 kPa)  
3000 PSIG (20,700 kPa)  
6000 PSIG (41,300 kPa)




B-20




WMS-1-53

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## MANIFOLD ACCESSORIES

PART NO.		GAS SERVICE	DESCRIPTION	MATERIAL
<b>MALE NPT OUTLET ADAPTORS FOR MANIFOLD PIPELINE, BRASS &amp; STAINLESS STEEL</b>				
500 PSIG (3400 kPa)				
3000 PSIG (20,700 kPa)				
6000 PSIG (41,300 kPa)				
				
<b>Oxygen, 3000 PSIG to 4000 PSIG:</b>				
B-578	CGA-577	.960"-14 NGO, RH Male to 1/2" NPT		Brass
<b>Argon, Helium, Nitrogen, Etc, to 3000 PSIG:</b>				
B-70	CGA-580	.965"-14 NGO, RH Female to 1/4" NPT		Brass
B-70SS	CGA-580	.965"-14 NGO, RH Female to 1/4" NPT		St. Steel
B-71	CGA-580	.965"-14 NGO, RH Female to 3/8" NPT		Brass
B-72	CGA-580	.965"-14 NGO, RH Female to 1/2" NPT		Brass
WMS-1-54	CGA-580	Check Valve Outlet to 1/2" NPT		Brass
B-73	CGA-580	.965"-14 NGO, RH Female to 3/4" NPT		Brass
<b>Industrial Air, to 3000 PSIG:</b>				
B-80	CGA-590	.965"-14 NGO, LH Female to 1/4" NPT		Brass
B-82	CGA-590	.965"-14 NGO, LH Female to 1/2" NPT		Brass
B-83	CGA-590	.965"-14 NGO, LH Female to 3/4" NPT		Brass
<b>Refrigerant Gases, to 3000 PSIG:</b>				
B-660-SS	CGA-660	1.030"-14 NGO, RH Male to 1/4" NPT		St. Steel
<b>Air, Argon, Helium, Etc, to 6000 PSIG:</b>				
B-677-SS	CGA-677	1.030"-14 NGO, LH Male to 1/4" NPT		St. Steel
B-678-SS	CGA-677	1.030"-14 NGO, LH Male to 1/2" NPT		St. Steel
B-679-SS	CGA-677	1.030"-14 NGO, LH Male to 3/4" NPT		St. Steel
<b>Inert Gases, to 5500 PSIG:</b>				
B-682	CGA-680	1.045"-14 NGO, RH Female to 1/2" NPT		Brass

PART NO.		W/CV	GAS SERVICE	DESCRIPTION	MATERIAL
<b>To 500 PSIG (3400 kPa)</b>					
T-16	T-16CV		CGA-300	Commercial Acet., RH Female	Brass
T-15	T-15CV		CGA-510	POL Acetylene, LH Male	Brass
FT-510	FT-510CV		CGA-510	POL Acet., LH Male w/ Flash Arrestor	Brass
<b>To 3000 PSIG (20,700 kPa)</b>					
T-296	-		CGA-296	Industrial Mix /Oxy., RH Male	Brass
T-CO-2	-		CGA-320	Carbon Dioxide, RH Female	Brass
T-326	T-326CV		CGA-326	Nitrous Oxide, RH Female	Brass
T-346	T-346CV		CGA-346	Air, RH Female	Brass
T-82	T-82CV		CGA-350	Hydrogen, LH Female	Brass
T-62	T-62CV		CGA-540	Oxygen, RH Female	Brass
T-62SS	-		CGA-540	Oxygen, RH Female	St. Steel
T-72	T-72CV		CGA-555	Propane (Liquid/Water) LH Female	Brass
T-92	T-92CV		CGA-580	Nitrogen, Argon, Helium, RH Male	Brass
T-93	T-93CV		CGA-590	Industrial Air, LH Male	Brass
<b>To 5500 PSIG (37,950 kPa)</b>					
T-347	-		CGA-347	Air, RH Female	Brass
T-347SS	-		CGA-347	Air, RH Female	St. Steel
T-680	-		CGA-680	Inert Gases, RH Male	Brass



**T-82**



**T-92CV**

**MANIFOLD COUPLER TEES, BRASS & STAINLESS STEEL WITH & WITHOUT CHECK VALVES**