














LINE FITTINGS - BRASS


ELBOWS						TEES						TEES											
Solder to Solder 						1 LINE Flare Line to Female Flare Branch 2 LINE 3 BRANCH 						Female BSP Line to Female BSP Branch 1 LINE 2 LINE 3 BRANCH 											
Size		Cat.No.		Heldon		Hudson		Size		Cat.No.		Heldon		Hudson		Size		Cat.No.		Heldon		Hudson	
Tube	Tube					1	2	3								1	2	3					
1/4	1/4	1941		2100	—																		
5/16	5/16	1942		2105	—																		
3/8	3/8	1943		2101	—																		
1/2	1/2	1944		2102	—																		
5/8	5/8	1945		2103	—																		
3/4	3/4	1946		2104	—																		
7/8	7/8	1947		2106	—																		
1	1	1948		2107	—																		
Tees						3 Way Flare						3 Way Solder											
1 LINE 2 LINE 						1 LINE 2 LINE 3 BRANCH 						1 LINE 2 LINE 3 BRANCH 											
1	2	3				1	2	3				1	2	3									
1/8	1/8	1/8	19411	2208	—	1/8	1/8	1/8	19481	2709	—	1/8	1/8	1/8	194121	2762	—						
3/16	3/16	3/16	19412	2207	2350	1/4	1/4	1/4	19482	2700	2501	1/4	1/4	1/4	194122	2760	2535						
1/4	1/4	1/4	19413	2200	2351	*1/4	1/4	1/8	19483	2700A	2502	3/8	3/8	3/8	194123	2764	2536						
5/16	5/16	5/16	19414	2201	2352	5/16	5/16	1/8	19484	2714	—	1/2	1/2	3/8	194124	2763	—						
3/8	3/8	3/8	19415	2202	2353	3/8	3/8	1/8	19485	2717	—	1/2	1/2	1/2	194125	2761	2537						
7/16	7/16	7/16	19416	2203	—	1/4	1/4	1/4	19486	2701	2503	3/4	3/4	3/4	194126	2766	—						
1/2	1/2	1/2	19417	2204	2354	5/16	5/16	1/4	19487	2722-30	—	SAME - LINE AND BRANCH											
5/8	5/8	5/8	19418	2205	2355	3/8	3/8	1/4	19488	2702	2507	3/16	3/16	3/16	194131	2306	—						
3/4	3/4	3/4	19419	2206	2356	1/2	1/2	1/4	19489	2713	—	1/4	1/4	1/4	194132	2300	—						
1	1	1	19420	2210	—	1/4	1/4	3/8	19490	2705	—	5/16	5/16	5/16	194133	2305	—						
Reducing to Branch						Reducing on Branch						Reducing on Branch											
1/4	1/4	3/16				1/4	1/4	3/8				1/4	1/4	3/16									
3/8	3/8	3/16	19425	—	A 2401	3/8	3/8	3/8	19491	2706	2508	5/8	5/8	1/4	194146	2515	—						
3/8	3/8	1/4	19426	2400	2402	1/2	1/2	3/8	19492	2703	2510	1/2	1/2	1/4	194144	2508	—						
1/2	1/2	1/4	19427	2401	2405	5/8	5/8	3/8	19493	2715	—	1/2	1/2	3/8	194145	2504	—						
1/2	1/2	5/16	19428	2401	—	3/8	3/8	1/2	19494	2711	—	5/8	5/8	3/8	194147	2506	—						
1/2	1/2	3/8	19429	2407	—	1/2	1/2	1/2	19495	2707	2511	5/8	5/8	1/2	194148	2501	—						
1/2	1/2	1/4	19430	2402	2406	5/8	5/8	1/2	19496	2704	2513	3/4	3/4	3/8	194149	2516	—						
5/8	5/8	1/4	19431	2405	—	3/4	3/4	1/2	19497	2716	—	3/4	3/4	1/2	194150	2507	—						
5/8	5/8	3/8	19432	2408	—	* Long Taper BSP						3/4	3/4	5/8	194151	2502	—						
5/8	5/8	1/2	19433	2403	—	Flare Line to BSP Line to Flare Branch						Increasing on Branch											
3/4	3/4	1/4	19434	2409	—							1/4	1/4	3/8									
3/4	3/4	3/8	19435	2410	—	1/2	1/2	3/4	19498	2710	—	3/8	3/8	1/2	194152	2512	—						
3/4	3/4	1/2	19436	2404	—	5/8	5/8	3/4	19499	2708	—	1/2	1/2	5/8	194154	2503	—						
3/4	3/4	5/8	19437	2406	—	3/4	3/4	3/4	194100	2712	—	1/2	1/2	3/4	194155	2509	—						
Increasing to Branch						Flare Line to Female BSP Branch						Reducing Line x Branch											
1/4	1/4	3/8																					
3/8	3/8	1/2	19441	2600	2401	1/4	1/4	1/8	194101	2740	—	1/4	3/16	3/16	194161	2531	—						
3/8	3/8	5/8	19442	2601	2403	3/4	1/4	3/4	194102	2741	—	1/4	3/16	1/4	194162	2530	—						
3/8	3/8	5/8	19443	2607	2404	3/8	3/8	3/8	194103	2743	—	3/8	1/4	1/4	194163	2533	—						
1/2	1/2	5/8	19444	2602	2407	1/2	1/2	1/2	194104	2744	—	3/8	1/4	3/8	194164	2532	—						
1/2	1/2	3/4	19445	2606	—	3/4	3/4	3/4	194105	2745	—	1/2	3/8	3/8	194165	2535	—						
5/8	5/8	3/4	19446	2603	—	M.BSP Line to M.BSP Branch						1/2	3/8	1/2	194166	2534	—						
Reducing to Line and Branch												5/8	3/8	3/8	194167	2538	—						
3/8	1/4	1/4										5/8	1/2	1/2	194168	2537	—						
1/2	1/2	1/4	19451	2777	2454	1/4	1/4	1/8	194106	2723	—	5/8	1/2	5/8	194169	2536	—						
1/2	1/2	1/4	19452	2779	—	3/8	3/8	1/8	194107	2733-32	2530	3/4	1/2	3/8	194170	2540	—						
1/2	3/8	3/8	19453	2780-10	2457	1/4	1/4	1/4	194108	2720	—	3/4	1/2	1/2	194171	—	—						
5/8	1/2	1/2	19454	2772	—	3/8	3/8	1/4	194109	2721	—	3/4	1/2	5/8	194172	2539	—						
3/4	1/2	1/2	19455	2783-10	—	1/2	1/2	1/4	194110	2722	—	3/4	5/8	5/8	194173	2541	—						
3/4	5/8	5/8	19456	2784-10	—	M.BSP Line to M.BSP Branch						3/4	5/8	3/4	194174	2542	—						
Increasing to Line and Branch												Sundry											
3/16	1/4	1/4										1/4	3/4	1/4									
1/4	3/8	3/8	19461	—	—	1/8	1/8	1/8	194111	2652	—	3/4	1/4	3/4	19471	2773	—						
1/4	3/8	3/8	19462	—	—	1/4	1/4	1/4	194112	2651	2520	3/4	1/4	3/4	19472	2770	—						
1/4	3/8	3/8	19463	2774	2451	3/8	3/8	1/4	194113	2657	—	3/4	5/8	3/4	19473	2771	—						
1/4	1/2	1/2	19464	2775	—	3/8	3/8	3/8	194114	2655	2521												
1/4	5/8	5/8	19465	2776	—	1/2	1/2	3/8	194115	2650	—												
3/8	1/2	1/2	19466	2778	2455	1/2	1/2	1/2	194116	2654	—												
1/2	5/8	5/8	19467	2781-10	—	3/4	3/4	3/4	194117	2656	—												
5/8	3/4	3/4	19468	—	—	1	1	1	194118	2653	—												


3


LINE FITTINGS - BRASS


VALVES DIAPHRAGM - PACKLESS


2-WAY & 3-WAY LINE


	2-WAY LINE -- MALE FLARE								
	SIZE	CAT. NO.	HELDON P/N	HUDSON P/N	HUDSON COMPACT		CASTEL		SIZE
	FLARE				CAT. NO.	P/N	CAT. NO.	P/N	FLARE
	1/4	1952	420	→	195226	15000	195121	6210/2	1/4
	5/16	1953	421	→	195227	15001	—	—	5/16
	3/8	1954	422	→	195228	15002	195122	6210/3	3/8
	1/2	1955	423	→	195229	15003	195123	6210/4	1/2
	5/8	1956	424	A15004	—	—	195124	6210/5	5/8
	3/4	1958	—	A15025	—	—	195125	6210/6	3/4
	3/4 Full Flo	1957	425	A15005	—	—	—	—	3/4 Full Flo


	2-WAY LINE -- FEMALE SOLDER								
	SIZE	CAT. NO.	HELDON P/N	HUDSON P/N	HUDSON COMPACT		CASTEL		SIZE
	OD TUBE				CAT. NO.	P/N	CAT. NO.	P/N	OD TUBE
	1/4	19511	520	→	195233	15006	195126	6220/2	1/4
	5/16	19512	521	→	195234	15007	—	—	5/16
	3/8	19513	522	→	195235	15008	195127	6220/3	3/8
	1/2	19514	523	→	195236	15009	195128	6220/4	1/2
	5/8	19515	524	A15010	—	—	195129	6220/5	5/8
	3/4 Red.Flo	19516	525	A15012	—	—	—	—	3/4 Red.Flo
	3/4 Full Flo	19517	528	A15011	—	—	195130	6220/6	3/4 Full Flo
	7/8 Red.Flo	19510	—	A15013	—	—	195159	6220/7	7/8 Red.Flo
	7/8 Full Flo	19518	526	A15014	—	—	—	—	7/8 Full Flo


	2-WAY LINE -- FEMALE SOLDER WITH COPPER EXTENSIONS						
	SIZE	CAT. NO.	HELDON P/N	HUDSON P/N	HUDSON COMPACT		SIZE
	OD TUBE				CAT. NO.	P/N	OD TUBE
	1/4	19521	560	→	195242	15015	1/4
	5/16	19522	561	→	195243	15016	5/16
	3/8	19523	562	→	195244	15017	3/8
	1/2	19524	563	→	195245	15018	1/2
	5/8	19525	564	A15019	—	—	5/8
	3/4 Red.Flo	19526	565	A15021	—	—	3/4 Red.Flo
	3/4 Full Flo	19528	568	A15020	—	—	3/4 Full Flo
	7/8 Red.Flo	19527	—	A15022	—	—	7/8 Red.Flo
	7/8 Full Flo	19529	566	A15023	—	—	7/8 Full Flo

	2-WAY LINE -- MALE BSP		
	SIZE	CAT. NO.	HELDON P/N
	M.BSP		
	1/4	19532	410
	3/8	19533	411
	1/2	19534	412
	3/4	19535	413

	2-WAY LINE -- FEMALE BSP		
	SIZE	CAT. NO.	HELDON P/N
	F.BSP		
	1/8	19536	370
	1/4	19537	371
	3/8	19538	372
	1/2	19539	373

	3-WAY LINE -- MALE FLARE								
	SIZE	CAT. NO.	HELDON P/N	HUDSON P/N	HUDSON COMPACT		CASTEL		SIZE
	FLARE				CAT. NO.	P/N	CAT. NO.	P/N	FLARE
	1/4	19551	210	→	195251	15100	195146	6260/2	1/4
	5/16	—	—	→	195252	15101	—	—	5/16
	3/8	19553	212	→	195253	15102	195147	6260/3	3/8
	1/2	19554	213	A15103	—	—	195148	6260/4	1/2
	5/8	19555	214	A15104	—	—	—	—	5/8

	3-WAY LINE -- FEMALE SOLDER					
	Size	CAT. NO.	Heldon P/N	Hudson P/N	Hudson Compact	
	OD Tube				Cat. No.	P/N
	1/4	19561	310	→	195256	15106
	5/16	—	—	→	195257	15107
	3/8	19563	312	→	195258	15108
	1/2	19564	313	A15109	—	—
	5/8	—	—	A15110	—	—
	3/4	19566	315	—	—	—

	3-WAY LINE -- FEMALE SOLDER WITH COPPER EXTENSIONS		
	Size	CAT. NO.	Heldon P/N
	OD Tube		
	1/4	19571	320
	5/16	19572	321
	3/8	19573	322
	1/2	19574	323
	5/8	19575	324
	3/4	19576	325

LINE FITTINGS - BRASS

DIAPHRAGM VALVES - PACKLESS

2-WAY ANGLE

2-WAY ANGLE - MALE FLARE SIDE TO MALE BSP BOTTOM								
SIZE		CAT. NO.	HELDON P/N	HUDSON P/N	HUDSON COMPACT		CASTEL	
FLARE	BSP				CAT. NO.	P/N	CAT. NO.	P/N
1/4	1/4	19581	100	→		15199	195149	6230/22
1/4	3/8	19582	101	→		15200		
1/4	1/2	19583	102					
3/8	1/4	19584	103					
3/8	3/8	19585	104	→		15201	195150	6230/33
3/8	1/2	19586	105	A15202				
1/2	1/4	19587	110					
1/2	3/8	19588	106					
1/2	1/2	19589	107	A15203			195151	6230/44
1/2	3/4			A15205				
5/8	1/4	19590	111					
5/8	3/8	19591	108					
5/8	1/2	19592	109	A15204				
3/4	1/2	19593	113					
3/4	3/4	19594	112	A15206				

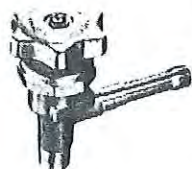


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2-WAY ANGLE - SOLDER SIDE TO MALE BSP BOTTOM						
SIZE		CAT. NO.	Heldon P/N	Hudson P/N	Hudson Compact	
OD Tube	BSP				CAT. NO.	P/N
1/4	1/4	195101	120			
1/4	3/8	195102	121			
1/4	1/2	195103	122			
3/8	1/4	195104	123	→		15207
3/8	3/8	195105	124	→		15208
3/8	1/2	195106	125	A15209		
1/2	1/4	195107	126			
1/2	3/8	195108	127			
1/2	1/2	195109	128	A15210		
1/2	5/8			A15211		
1/2	3/4			A15212		
5/8	1/4	195110	129			
5/8	3/8	195111	130			
5/8	1/2	195112	131			
3/4	1/4	195113	132			
3/4	3/8	195114	133			
3/4	1/2	195115	134			
3/4	3/4			A15213		




2-WAY ANGLE - SOLDER SIDE WITH COPPER EXT., MALE BSP BOTTOM			
SIZE		CAT. NO.	HELDON P/N
OD Tube	BSP		
1/4	1/4	195201	135
1/4	3/8	195202	136
1/4	1/2	195203	137
3/8	1/4	195204	138
3/8	3/8	195205	139
3/8	1/2	195206	140
1/2	1/4	195207	141
1/2	3/8	195208	142
1/2	1/2	195209	143
5/8	1/4	195210	144
5/8	3/8	195211	145
5/8	1/2	195212	146
3/4	1/4	195213	147
3/4	3/8	195214	148
3/4	1/2	195215	149




LINE FITTINGS - BRASS

PACKED CAPPED VALVES

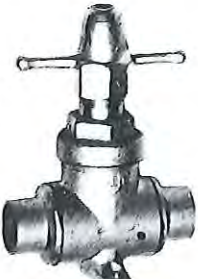

2-WAY LINE & 2-WAY ANGLE




2-WAY LINE - MALE FLARE						
SIZE FLARE	CAT. NO.	HELDON P/N	HUDSON P/N	CASTEL		SIZE FLARE
				CAT. NO.	P/N	
1/4	19641	190	1151	19639	6010/2	1/4
3/8	19642	191	1152	195131	6410/3	3/8
1/2	19643	192	1153	195132	6410/4	1/2
5/8	19644	193	1154	195133	6410/5	5/8
3/4	—	—	—	195134	6410/6	3/4



2-WAY LINE - FEMALE SOLDER						
SIZE O.D. TUBE	CAT. NO.	HELDON P/N	HUDSON P/N	CASTEL		SIZE O.D. TUBE
				CAT. NO.	P/N	
1/4	19646	195	1155	195135	6420/2	1/4
3/8	19647	196	1156	195136	6420/3	3/8
1/2	19648	197	1157	195137	6420/4	1/2
5/8	19649	198	1158	195138	6420/5	5/8
3/4	19650	199	—	195139	6420/6	3/4
7/8	—	—	—	195140	6420/7	7/8

2-WAY LINE - BACKSEATING - FEMALE SOLDER									
SIZE O.D. TUBE	HELDON		HUDSON COMPACT				CASTEL		SIZE O.D. TUBE
	WITH 'T' HANDLE		WITH CAP NUT		WITH 'T' HANDLE		WITH 'T' HANDLE		
	CAT. NO.	P/N	CAT. NO.	P/N	CAT. NO.	P/N	CAT. NO.	P/N	
3/4	1961	160	196301	1000	196307	1000T	—	—	3/4
7/8	1962	165	196302	1001	196308	1001T	195141	6510/7	7/8
1	1963	162	196303	1002	196309	1002T	—	—	1
1-1/8	1964	161	196304	1003	196310	1003T	195142	6510/9	1-1/8
1-3/8	1965	163	196305	1004	196311	1004T	195143	6510/11	1-3/8
1-5/8	1966	164	196306	1005	196312	1005T	195144	6510/13	1-5/8
2-1/8	1967	166	19610L	1166	1967	1166T	195145	6510/17	2-1/8
2-5/8	1968	167	19611L	1167	1968	1167T	195160	6510/21	2-5/8
3-1/8	—	—	19612L	1168	1969	1168T	—	—	3-1/8
FEMALE SOLDER WITH COPPER TAILS									
3/4	—	—	196313	1010	196319	1010T	—	—	3/4
7/8	—	—	196314	1011	196320	1011T	—	—	7/8
1	—	—	196315	1012	196321	1012T	—	—	1
1-1/8	—	—	196316	1013	196322	1013T	—	—	1-1/8
1-3/8	—	—	196317	1014	196323	1014T	—	—	1-3/8
1-5/8	—	—	196318	1015	196324	1015T	—	—	1-5/8
FEMALE BSP									
3/4	19611	170	—	—	—	—	—	—	3/4
1	19612	171	—	—	—	—	—	—	1
HUDSON 'T' HANDLE VALVE CAPS				CAT. NO.	CASTEL MOUNTING FEET				CAT. NO.
P/N 1000/41 Suits 3/4, 7/8, 1				196332	P/N 6590/A Suits 7/8, 1-1/8, 1-3/8, 1-5/8				195164
P/N 1003/41 Suits 1-1/8, 1-3/8, 1-5/8				196333	P/N 6590/B Suits 2-1/8, 2-5/8				195165
P/N 1231 Suits 2-1/8, 2-5/8, 3-1/8				196334					




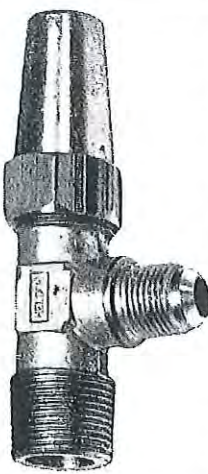
2-WAY ANGLE - BACKSEATING - FEMALE SOLDER									
SIZE OD TUBE	HELDON		HUDSON COMPACT				CASTEL		SIZE OD TUBE
	WITH "T" HANDLE		WITH CAP NUT		WITH "T" HANDLE		WITH "T" HANDLE		
	Cat. No.	P/N	Cat. No.	P/N	Cat. No.	P/N	Cat. No.	P/N	
7/8	19621	300	196325	1101	19619	1101T	195161	6530/7	7/8
1-1/8	19622	301	196326	1103	19620	1103T	195162	6530/9	1-1/8
1-3/8	19623	302	196327	A15302	19623L	A15302T	195163	6530/11	1-3/8
1-5/8	19624	303	196328	A15303	19624L	A15303T	—	—	1-5/8
2-1/8	19625	304	196329	A15304	19625L	A15304T	—	—	2-1/8
2-5/8	19626	305	196330	A15305	19626L	A15305T	—	—	2-5/8
3-1/8	—	—	196331	A15306	19627L	A15306T	—	—	3-1/8
HUDSON "T" HANDLE VALVE CAPS							CAT. NO.		
P/N 1003/41 Suits Valve Sizes 7/8, 1-1/8							196333		
P/N 1215 Suits Valve Sizes 1-3/8, 1-5/8							196335		
P/N 1231 Suits Valve Sizes 2-1/8, 2-5/8, 3-1/8							196334		

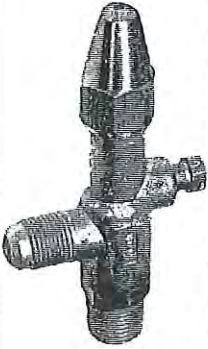

LINE FITTINGS - BRASS


PACKED CAPPED VALVES

2-WAY LINE 'Y' TYPE & 2-WAY ANGLE

	2-WAY LINE - 'Y' TYPE FEMALE SOLDER				
	SIZE	HUDSON COMPACT			
	O.D.	WITH CAP NUT		WITH 'T' HANDLE	
	TUBE	CAT. NO.	P/N	CAT. NO.	P/N
	1-1/8	19613	1053	19616	1053T
	1-3/8	19614	A10504	19617	A10504T
1-5/8	19615	A10506	19618	A10506T	
HUDSON 'T' HANDLE VALVE CAPS				CAT. NO.	
P/N 1003/41		Suits 1-1/8		196333	
P/N 1215		Suits 1-3/8, 1-5/8		196335	

	2-WAY ANGLE - MALE FLARE SIDE TO BSP BOTTOM								
	SIZE		CAT. NO.	HELDON P/N	HUDSON P/N	CASTEL*		SIZE	
	FLARE	BSP				CAT. NO.	P/N	FLARE	BSP
	1/4	1/4	19672	600	1251	196176	6110/22	1/4	1/4
	1/4	3/8	19673	601	1252	196177	6110/23	1/4	3/8
	1/4	1/2	19674	611	—	—	—	1/4	1/2
	3/8	1/4	19675	602	1253	196183	6110/32	3/8	1/4
	3/8	3/8	19676	603	1254	196178	6110/33	3/8	3/8
	3/8	1/2	19677	610	1250	—	—	3/8	1/2
	3/8	3/4	19678	612	—	—	—	3/8	3/4
	1/2	3/8	19679	604	1255	196179	6110/43	1/2	3/8
	1/2	1/2	19680	608	1256	196180	6110/44	1/2	1/2
	1/2	3/4	19681	613	—	—	—	1/2	3/4
	5/8	3/8	19682	605	—	—	—	5/8	3/8
	5/8	1/2	19683	606	1258	196181	6110/54	5/8	1/2
5/8	3/4	19684	615	—	—	—	5/8	3/4	
3/4	1/2	19685	607	—	—	—	3/4	1/2	
3/4	3/4 Red.	19686	609	—	—	—	3/4	3/4 Red.	
3/4	3/4 Full	19687	619	1259	196182	6110/66	3/4	3/4 Full	
* Castel Connections - Flare Side x N.P.T. Bottom									

2-WAY ANGLE - BACKSEATING - TAPPED FOR GAUGE									
	MALE FLARE SIDE TO BSP BOTTOM					MALE BSP SIDE TO MALE FLARE BOTTOM			
	SIZE		HELDON			SIZE		HELDON	
	FLARE	BSP	CAT. NO.	P/N		BSP	FLARE	CAT. NO.	P/N
	1/4	1/4	19691	650		1/4	1/4	196121	670
	1/4	3/8	19692	651		1/4	3/8	196123	672
	3/8	1/4	19693	652		1/4	1/2	196124	674
	3/8	3/8	19694	653		3/8	1/4	196125	671
	3/8	1/2	19695	658		3/8	3/8	196127	673
	1/2	1/4	19696	654		3/8	1/2	196128	675
	1/2	3/8	19697	655		1/2	3/8	196129	678
	1/2	1/2	19698	657		1/2	1/2	196130	677
5/8	3/8	19699	659	1/2	5/8	196131	676		
5/8	1/2	196100	656	3/4	3/8	196132	680		
				3/4	5/8	196133	679		

2-WAY ANGLE STAINLESS STEEL SPINDLE BACKSEATING TAPPED FOR GAUGE CONNECTION				
	CONNECTIONS		CAT. NO.	HUDSON P/N
	SIDE	BOTTOM		
	1/2M.BSP	5/8M.FI.	19669	A15295
	5/8F.Sol.	5/8F.Sol.	19665	A15296
	5/8M.FI.	5/8F.Sol.	19666	A15297
	3/4M.BSP	3/4M.FI.	19667	A15268
	3/4M.FI.	3/4M.BSP	19668	A15270
	7/8F.Sol.	3/4M.BSP	19662	A15272
	7/8F.Sol.	7/8F.Sol.	19663	A15274

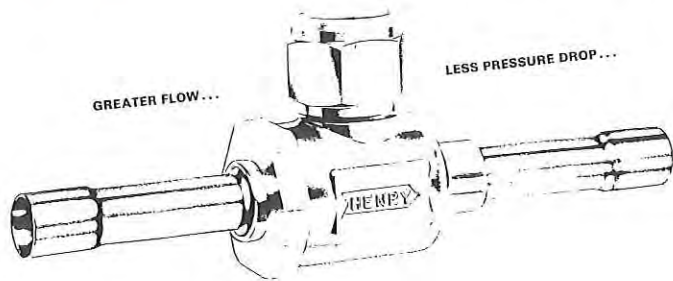
2-WAY ANGLE MALE BSP SIDE TO MALE FLARE BOTTOM				
SIZE		CAT. NO.	HELDON P/N	HUDSON P/N
BSP	FLARE			
1/4	1/4	196101	620	—
1/4	3/8	196102	622	—
3/8	1/4	196103	621	—
3/8	3/8	196104	623	—
3/8	1/2	196105	624	—
3/8	5/8	196106	625	—
1/2	1/4	196107	631	—
1/2	3/8	196108	630	A15261
1/2	1/2	196109	628	A15260
1/2	5/8	196110	626	A15264
1/2	3/4	196111	627	—
3/4	3/8	196112	632	—
3/4	1/2	196113	633	—
3/4	3/4 Red.	196114	629	—
3/4	3/4 Full	196115	639	—

LINE FITTINGS - BRASS



HENRY

BALL VALVES FOR REFRIGERATION AND AIR CONDITIONING APPLICATIONS

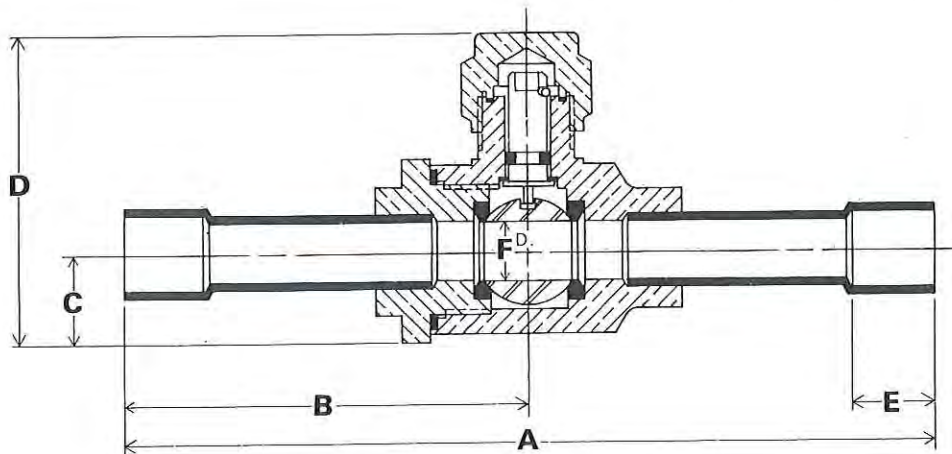


CONSTRUCTION

- Forged brass body
- Brass seal cap with Teflon gasket
- Extended copper solder connections
- Chromium plated ball
- Teflon ball seals
- Blow-out proof stem design
- "O" Ring stem seal
- Plated stem with stamped flow arrow

CHECK THESE FEATURES:

- ★ Light weight – straight thru flow
- ★ Fast, only quarter turn for full open or closed
- ★ Valve position indicators
 1. Arrow on body shows flow direction
 2. Arrow on stem points downstream when valve is open
 3. Arrow on stem points across the line of flow when valve is closed
- ★ Stops on valve stem ensures precise positioning of valve in open or closed position
- ★ No need to dismantle valve for brazing
- ★ Seal cap patented double seal
- ★ Pressure in valve body is automatically vented to upstream side when valve is shut off
- ★ Maximum working pressure 3450 kPa (500 psig)
- ★ Temperature range: -40°C to 132°C (-40°F to 270°F)





SIZES AND DIMENSIONS – INCHES

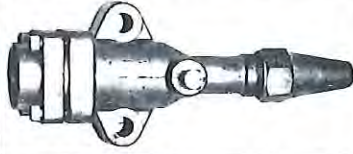
CAT. NO.	PART No.	O.D.S. CONN.	A	B	C	D	E	F Diam.
196215	900203	3/8	5-1/2	2-27/32	23/32	2-9/32	5/16	1/2
196216	900204	1/2	6-3/8	3-9/32	23/32	2-9/32	3/8	1/2
196217	900205	5/8	6-3/8	3-9/32	23/32	2-9/32	1/2	1/2
196218	900307	7/8	7-7/16	3-23/32	29/32	2-11/16	3/4	11/16
196219	900309	1-1/8	8-15/16	4-15/32	29/32	2-11/16	29/32	11/16
196220	900409	1-1/8	9-1/8	4-3/4	1"	3-7/32	29/32	13/16
196221	900411	1-3/8	9-7/8	5-1/8	1"	3-7/32	1"	13/16
196222	900511	1-3/8	10	5	1-5/16	3-29/32	1"	1-1/4
196223	900513	1-5/8	10-1/4	5-1/8	1-5/16	3-29/32	1-3/32	1-1/4
196224	900617	2-1/8						


LINE FITTINGS - BRASS

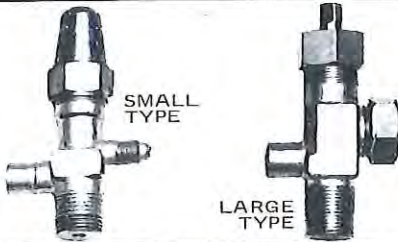
VALVES - SUNDRY


COMPRESSOR SERVICE VALVES MALE FLARE CONNECTIONS				
				
Size Flare	Bolt Hole Centres	CAT. NO.	Heldon P/N	Hudson P/N
1/4	1-5/8	1973	700	—
3/8	1-5/8	1977	701	1302
1/2	1-5/8	19710	702	1303
1/2	1-3/4	19711	706	—
5/8	1-5/8	19714	703	1304
5/8	1-3/4	19715	707	—
3/4	1-5/8	19718	—	1319
HEAVY FORGED BODY				
5/8	1-5/8	19721	719	—
3/4	1-5/8	19723	716	1305

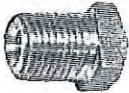
COMPRESSOR SERVICE VALVES SOLDER CONNECTIONS				
				
Size O.D. Tube	Bolt Hole Centres	CAT. NO.	Heldon P/N	Hudson P/N
3/8	1-5/8	19737	771	—
1/2	1-5/8	19741	772	1317
5/8	1-5/8	19745	773	1318
HEAVY FORGED BODY				
5/8	1-5/8	19751	726	—
3/4	1-5/8	19753	724	1308
7/8	1-5/8	19755	721	1309
7/8	1-3/4	19756	722	—
1	1-5/8	19757	725	1338
1-1/8	1-5/8	19759	723	—
1-1/8	1-3/4	19760	727	—

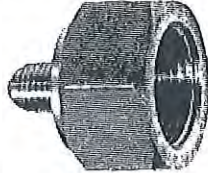
COMPRESSOR SERVICE VALVES FLANGED - 2 1/4" CENTRES WITH O.D. SOLDER ADAPTORS			
			
SIZE O.D. Tube	CAT. NO.	Heldon P/N	Hudson P/N
1	19761	750	11004
1-1/8	19762	751	11000
1-1/4	19763	753	11001
1-3/8	19764	752	11002
1-1/2	19765	754	—
1-5/8	19766	755	11007
Valve Complete with Solder Adaptor			
1	19761	750	11004
1-1/8	19762	751	11000
1-1/4	19763	753	11001
1-3/8	19764	752	11002
1-1/2	19765	754	—
1-5/8	19766	755	11007
HEAVY DUTY			
1-3/8	197151	—	11006
1-5/8	197152	—	11007
LIGHT DUTY			
1	197153	—	11101
1-1/8	197154	—	11102
1-1/4	197155	—	11103
1-3/8	197156	—	11104

POST VALVES MALE FLARE TO FEMALE SOLDER			
			
Size		CAT. NO.	Hudson P/N
Flare	O.D. Tube		
3/8	3/8	197116	14201

CYLINDER VALVES WITH PRESSURE RELIEF VALVE				
 <small>SMALL TYPE</small> <small>LARGE TYPE</small>				
CONNECTIONS		CAT. NO.	Heldon P/N	Hudson P/N
Side	Bottom			
1/4 Fl.	1/4 NPT	19790	—	1384
1/4 Fl.	3/8 BSP	19794	—	1380
1/4 Fl.	1/2 BSP	19793	—	1388
LARGE TYPE				
3/4M.BSP	3/4NPTG	19795	592	A1359

PURGE OR TRYCOCK VALVES			
			
Size M.BSP	CAT. NO.	Heldon P/N	Hudson P/N
1/8	197111	3800	1291
1/4	197112	3801	—

FUSIBLE SAFETY PLUGS					
					
Size BSP	Temperature		CAT. NO.	Heldon P/N	Hudson P/N
	°C	°F			
UNTINNED					
1/8	55	130	197127	3256	—
1/8	71	160	197121	—	2065
1/8	93	200	197122	3250	—
1/8	96	205	197128	—	2063
1/8	138	280	197123	3257	2064
1/4	58	136	197129	3259	2069
1/4	66	151	197130	—	2067
1/4	71	160	197124	3255	2066
1/4	93	200	197125	3251	—
1/4	96	205	197131	—	2068
3/8	135	275	197132	3258	—
1/2	71	160	197133	3252	—
3/4	93	200	197134	3253	—
TINNED					
1/8	55	130	197135	3156	—
1/8	71	160	197136	3154	2022
1/8	93	200	197137	3150	—
1/8	96	205	197138	—	2020
1/8	138	280	197139	3157	2021
1/4	58	136	197140	3159	2026
1/4	71	160	197141	3155	2023
1/4	93	200	197142	3151	—
1/4	96	205	197143	—	2025
3/8	135	275	197144	3158	—
1/2	71	160	197145	3152	—
3/4	93	200	197146	3153	—

CYLINDER ADAPTORS WITH LEAD WASHERS				
				
SIZE		CAT. NO.	Heldon P/N	Hudson P/N
Flare	F.BSP			
1/4	3/8	197107	1456	2820
1/4	1/2	197101	1452	2821
1/4	5/8	197106	1450	—
1/4	3/4	197103	1451	2822
3/8	1/8	—	1458	—
3/8	1/4	—	1459	—
3/8	3/8	—	1457	—
3/8	1/2	197102	1463-1	—
3/8	5/8	197108	1455	—
3/8	3/4	197104	1461	—
1/2	3/8	—	1454	—
1/2	5/8	—	1453	—
1/2	3/4	197105	1460-1	—
5/8	3/4	—	1462-1	—
3/4	3/4	—	1467-1	—

PURGE VALVE KEY			
			
Size Square	CAT. NO.	Heldon P/N	Hudson P/N
3/16"	197113	—	4363

GAS CYLINDER SEAL CAPS WITH LEAD WASHERS			
			
Size F.BSP	CAT. NO.	Heldon P/N	Hudson P/N
1/2	19797	1493	2075
5/8	197109	1494	—
3/4	19798	1495	2076
Other Sizes on Application			

3

LINE FITTINGS - SUNDRY

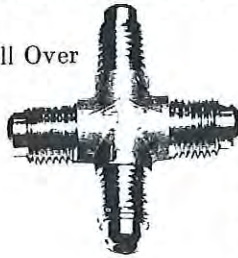
SWIVEL CONNECTORS (FORGED NUTS)



CAT. NO.	SIZE (ins.)	Heldon P/N	Hudson P/N
1981	1/4	1180	2861
1982	3/8	1181	2862
1983	1/2	1182	2863
1984	5/8	1183	2864
1985	3/4	1184	2865

CROSS PIECES—FORGED

Male Flare All Over



CAT. NO.	SIZE (ins.)	HUDSON P/N
1986	1/4	2551
1987	3/8	2552
1988	1/2	2553

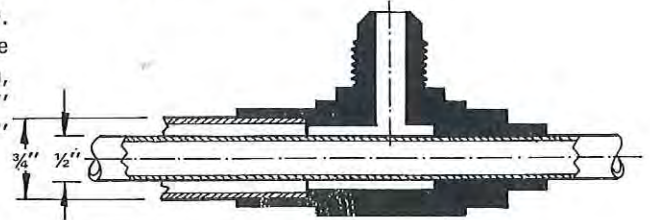
QUICK-ACTING COUPLERS



CAT. NO.	SIZE	Heldon P/N	Hudson P/N
19813	1/4" Short Type	—	2833
19811	1/4" Long Type	—	2831
19851	3/8" Short Type	3601	—
19852	1/2" Short Type	3602	—
19853	5/8" Short Type	3603	—
19814	Rubbers-Short Type	—	2834
19812	Rubbers-Long Type	—	2832
19854	Replacement Neoprene Gasket	3600R	—

Heldon HEAT EXCHANGE TEE

The Heldon Heat Exchange Tee is designed to fit over a 1/2" O.D. line and take a 3/4" O.D. tube one end only. When two tees are therefore joined together by a piece of 3/4" O.D. tube of any length, the result is a heat exchanger having a 1/2" inner tube and a 3/4" outer shell. The capacity would depend on the length of the 3/4" tube.

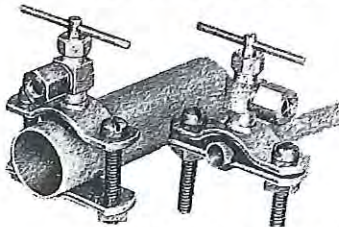


PART NO. 19707	CAT. NO. 19818
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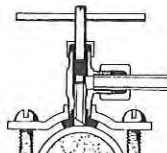
SADDLE TAPPING VALVE

NO - SHUTTING OFF VALVES - DRAINING LINES - DRILLING INTO TUBING

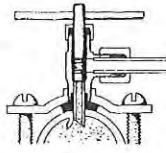
PART NO. STV2	CAT. NO. 19820
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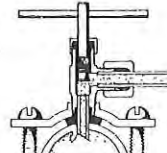
A WORKING VALVE IN 3 MINUTES



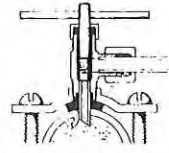
STEP 1



STEP 2



STEP 3



STEP 4

SPECIFICATIONS

Part No. — STV2.

Construction - Brass Valve body and Spindle, Stainless Steel Handle and Piercing lance, "Iridited" Steel Clamps For 3/8" to 1-1/8" O.D. Copper Tube (1/4" to 1" nominal)
 Outlet - 1/4" Compression Fitting
 Capacity - 44 gallons per hour (45 lbs. water pressure)

- STEP 1. Clamp STV-2 on tube and connect line
- STEP 2. Turn handle to pierce tube
- STEP 3. Back off to open valve
- STEP 4. Turn in again to close valve

BULLET 3 IN 1 Piercing Valve

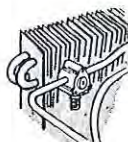
The Only Multi-Size Valve with a PERMANENT GASKET!



BULLET 3 IN 1 is the smallest complete piercing valve with its own key. ONLY 2" CLEARANCE IS REQUIRED FOR INSTALLATION AND OPERATION!



INSTALL ON ROUND SUCTION LINES OR UNEVEN TUBING



INSTALL ON HIGH SIDE PERMANENT



THE DOUBLE V MEANS A REAL VALVE WITH ITS OWN SEAT. HIGH COMPRESSION GASKET DOES NOT PINCH, NEVER LEAKS.

ONE SIZE FOR 1/4" • 5/16" 3/8" TUBING

PART NO. BPV31
CAT. NO.
19821

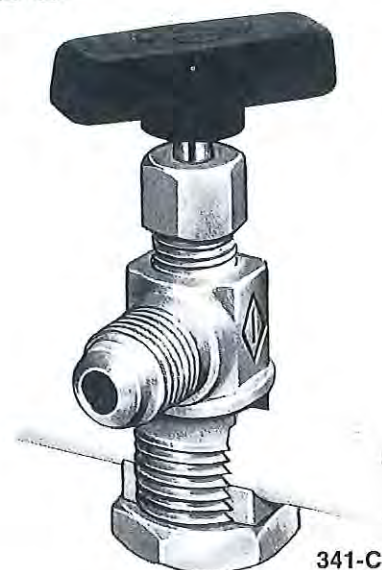
IMPERIAL Line Piercing Valves

TAP-A-LINE VALVES™ Universal Line Piercing Valves

Provide a quick and economical way to tap a line at any point for charging, testing or purging hermetically sealed units. Valve fits 3/16 thru 3/8" O.D. tubing and has 1/4" flare connections for charging lines.

Valve clamps on tubing line, one end of charging line is attached to 1/4" flare connection on valve and other end to testing unit or refrigerant drum. Valve stem is turned forward until sharp needle pierces tubing. Stem is then backed off for testing or charging. After service is completed, valve is closed and left on line for future service.

Valve has T-Grip handle and forged brass body. Sealing gasket is confined to prevent falling out. V-block centers valve on tube, and is attached to nut so that it can't be lost.



341-C

CAT. NO.	PART NO.	DESCRIPTION
19824	341-C	Line Piercing Valve
19858	67842	Seal Gasket

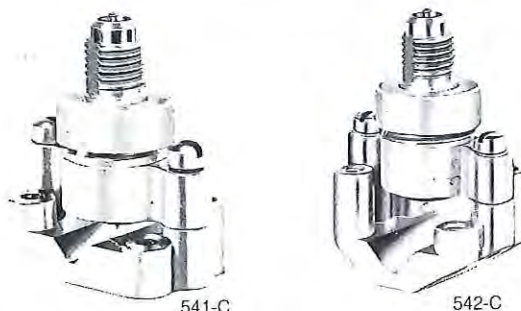
3

3 in 1 Piercing Valve

Fast, easy, secure installation. Provides access to line at any point for charging, testing or purging. Two valves cover 3/16" to 5/8" O.D. tubes. Has depressor valve and needle valve shut-off.

Valve clamps on tubing line with two captive slotted head screws; positive built-in mechanical stop for each tube size eliminates tightening guesswork. To pierce tube, thread down the combination 1/4" flare port, stem and needle using knob furnished or a suitable wrench; back off stem and connect depressor type hose for testing or charging. After service is completed, valve is closed and left on line for future service. Dust cap provided.

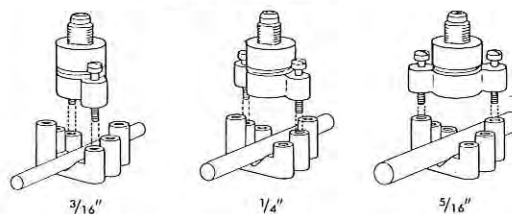
Three-point sealing (needle-type valve, gasket and check valve) prevents leakage. Neoprene seal withstands temperatures near 300°.



541-C

542-C

FITS THREE SIZES



CAT. NO.	PART NO.	DESCRIPTION
19822	541-C	Fits 3/16", 1/4" & 5/16" O.D. Tubes
19823	542-C	Fits 3/8", 1/2" & 5/8" O.D. Tubes

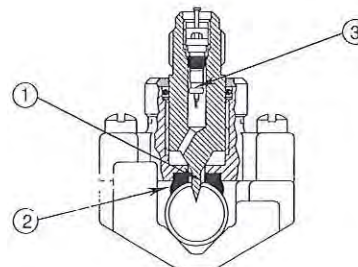
Two primary and one secondary sealing points assure leak-proof installation and operation.

PRIMARY SEALING

1. Needle valve shut-off with positive metal-to-metal seat provides leak-proof in-the-body seal.
2. Rubber gasket forms a tight leak-proof seal between tubing and valve.

SECONDARY SEALING

3. Check valve seals flow passage.



Cat. No.	Type	Description
19815	A-1	For 1/4, 5/16 and 3/8 in. tube. New A-1 valve incorporates a disappearing needle which automatically retracts to permit unrestricted flow. Standard 8/32 hex wrench and 2 inserts included with each valve.
19816	A-2	For 3/8, 1/2 and 5/8 in. O.D. tubing. Includes all features of A-1. Two inserts included.



A-1



No. A-2

WATSCO
ADJUSTABLE
LINE TAP VALVES



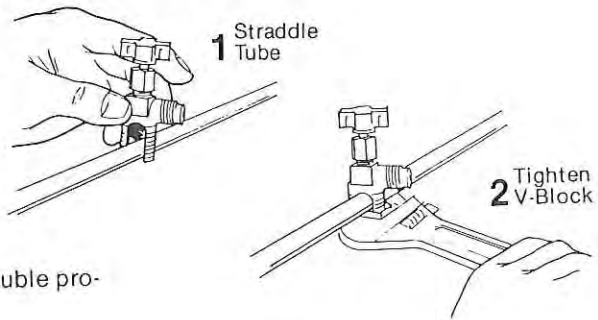
Tube piercing valves

Engineered for convenience, durability, and dependability — easy 2-step installation

Simple application eliminates:

1. Screws, nuts or bolts
2. Special control devices
3. Special wrenches or handles
4. All guesswork...is it open...is it closed...how many turns?

All HP and QP valves are furnished with Quick Seal Caps for double protection.



The preferred tube piercing valve

Redesigned forged brass body.

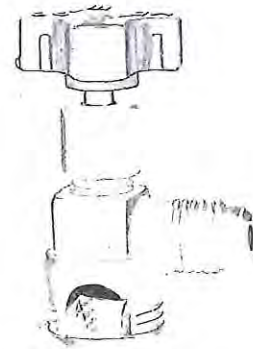
Improved nut and wedge assembly.

No special tools required.

Robinair HP Valves are used more than any other similar valve because they are the most trouble free and easiest to use. No special tools or parts are required.

They can be installed in any position, even while system is under pressure, on copper, aluminium, thin wall brass tube, wherever air, liquid or gas flow is required. Use in refrigeration for testing, in industry for controlling water to humidifiers and many other applications. One piece forged brass body construction.

CAT. NO.	PART NO.	DESCRIPTION
19838	40288	Fits 3/16", 1/4", 5/16" and 3/8" OD Tube. 1/4" SAE Conn. Size
19861	40291	Three Seal Gaskets for P/N 40288



40288

The QP tube piercing valve

Features special built-in refrigerant check

No special tools required.

Easiest to use.

This valve features a special built-in flow check and has same high quality and features as other models. It is designed specially for refrigeration use, but is suitable for similar applications in other industries. Valve is open only when unit is serviced with charging line or quick coupler having a valve depressor. For use on copper, aluminium or thin wall brass tubing.

CAT. NO.	PART NO.	DESCRIPTION
19865	40330	Fits 3/16", 1/4", 5/16" and 3/8" OD Tube. 1/4" SAE Conn. Size
19861	40291	Three Seal Gaskets for P/N 40330



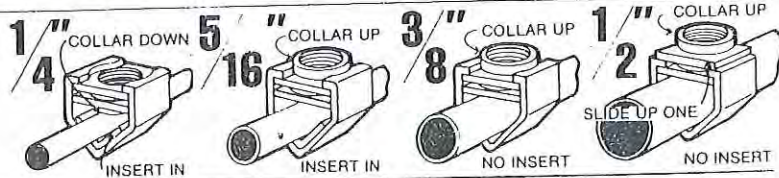
Fits 3/16", 1/4", 5/16" and 3/8" O.D. Tube

C&D

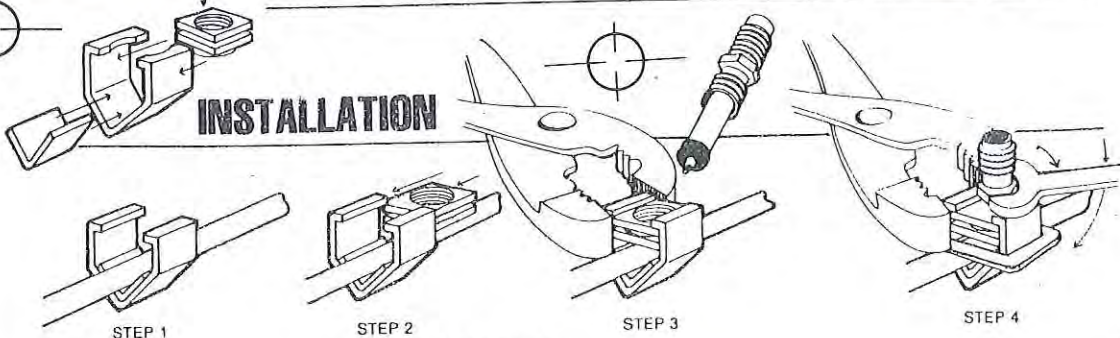
4V SERIES

A complete line tap valve. Each assembly fits four size lines.

CAT. NO.
19868

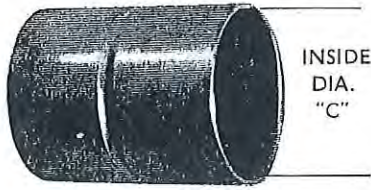


INSTALLATION

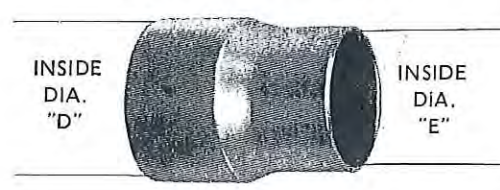


LINE FITTINGS - COPPER

**SOLDER
COUPLINGS/UNIONS**



**REDUCING SOLDER
COUPLINGS/UNIONS**



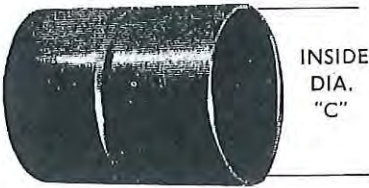
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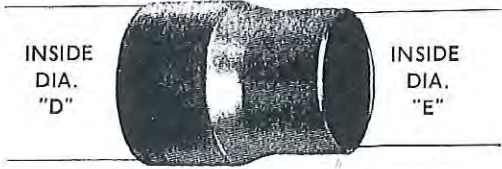
I.D. BOTH ENDS (FEMALE TO FEMALE)				INSIDE DIAM. TO INSIDE DIAM. (FEMALE TO FEMALE)									
CAT. NO.	INS. DIA. 'C'	HELDON	HUDSON	CAT. NO.	Ins. Dia. 'D'	Ins. Dia. 'E'	HELDON	HUDSON	CAT. NO.	DIMS. 'D'	DIMS. 'E'	HELDON	HUDSON
1991	3/16"	5103	W22003	19929	1/4"	3/16"	—	W22002	19927	1-5/8"	1-1/4"	5566	—
1992	1/4"	5100	W22000	19930	3/8"	1/4"	5559	W22020	19960	1-5/8"	1-3/8"	5520	W22111
1993	5/16"	5101	W22010	19931	1/2"	3/8"	5572	W22032	19961	1-5/8"	1-1/2"	5522	—
1994	3/8"	5102	W22022	19989	5/8"	3/8"	—	W22040	19962	1-3/4"	1-1/4"	5577	—
1995	1/2"	5104	W22033	19932	5/8"	1/2"	5513	W22041	19963	1-3/4"	1-1/4"	5553	—
1996	5/8"	5105	W22042	19933	3/4"	3/8"	5599	W22050	19994	1-3/4"	1-5/8"	5523	—
1997	3/4"	5106	W22053	19934	3/4"	1/2"	5573	W22051	19964	2"	1-1/8"	5569	—
1998	7/8"	5107	W22063	19935	3/4"	5/8"	5519	W22052	19965	2"	1-1/2"	5580	—
1999	1"	5108	W22074	19990	7/8"	3/8"	—	W22059	19966	2"	1-5/8"	5554	—
19910	1-1/8"	5109	W22084	19936	7/8"	1/2"	5595	W22060	19995	2-1/8"	7/8"	—	W22124
19911	1-1/4"	5110	W22090	19937	7/8"	5/8"	5576	W22061	19996	2-1/8"	1-1/8"	—	W22126
19912	1-3/8"	5111	W22101	19938	7/8"	3/4"	5565	W22062	19967	2-1/8"	1-3/8"	5556	W22128
19913	1-1/2"	5112	W22106	19939	1"	1/2"	5512	W22070	19968	2-1/8"	1-5/8"	5558	W22130
19914	1-5/8"	5113	W22113	19940	1"	5/8"	5578	W22071	19969	2-1/2"	1-1/8"	5568	—
19915	1-3/4"	5114	—	19941	1"	3/4"	5518	W22072	19970	2-1/2"	1-1/4"	5575	—
19916	2"	5116	W22120	19942	1"	7/8"	5574	W22073	19971	2-1/2"	1-3/8"	5594	—
19917	2-1/8"	5117	W22132	19943	1-1/8"	1/2"	5550	W22079	19972	2-1/2"	1-5/8"	5538	—
19918	2-1/2"	5120	—	19944	1-1/8"	5/8"	5563	W22080	19973	2-1/2"	2"	5609	—
19919	2-5/8"	5121	W22144	19945	1-1/8"	3/4"	5570	W22081	19974	2-1/2"	2-1/8"	5571	—
19920	3"	5124	—	19946	1-1/8"	7/8"	5524	W22082	19997	2-5/8"	1-1/8"	—	W221391
19921	3-1/4"	5126	—	19991	1-1/8"	1"	5542	W22083	19998	2-5/8"	1-3/8"	—	W221392
19922	3-1/2"	5127	—	19992	1-1/4"	3/4"	5611	W22086	19999	2-5/8"	1-5/8"	5621	W22139
19923	4"	5130	—	19947	1-1/4"	1"	5528	W22088	19975	2-5/8"	2-1/8"	5584	W22141
				19948	1-1/4"	1-1/8"	5567	W22089	19976	3"	1-1/8"	5587	—
				19949	1-3/8"	5/8"	5551	W22095	19977	3"	2"	5544	—
				19950	1-3/8"	3/4"	5593	—	19978	3"	2-1/8"	5562	—
				19951	1-3/8"	7/8"	5552	W22097	19979	3"	2-1/2"	5555	—
				19952	1-3/8"	1"	5579	—	19980	3"	2-5/8"	5590	—
				19953	1-3/8"	1-1/8"	5517	W22099	19981	3-1/2"	1-3/8"	5557	—
				19954	1-3/8"	1-1/4"	5525	—	19982	3-1/2"	2-1/8"	5598	—
				19955	1-1/2"	7/8"	5564	—	19983	3-1/2"	2-5/8"	5561	—
				19956	1-1/2"	1"	5585	—	19984	3-1/2"	3"	5560	—
				19957	1-1/2"	1-1/4"	5514	—	19985	4"	2-1/2"	5597	—
				19958	1-1/2"	1-3/8"	5527	—	19986	4"	2-5/8"	5588	—
				19993	1-5/8"	7/8"	—	W22108	19987	4"	3-1/2"	5596	—
				19959	1-5/8"	1-1/8"	5586	W22109	19988	4-1/8"	2-5/8"	5589	—



WE ARE AS
NEAR AS YOUR
NEAREST TELEPHONE

IDEAL LINE FITTINGS - COPPER

 <p style="text-align: center;">SOLDER COUPLINGS/UNIONS</p> <p style="text-align: center;">INSIDE DIA. "C"</p>		INSIDE DIAM. BOTH ENDS FEMALE TO FEMALE – SOLDER		
		CAT. NO.	INSIDE DIAM. C	IDEAL P/N
	1992A	1/4"	R060	
	1994A	3/8"	R061	
	1995A	1/2"	R062	
	1996A	5/8"	R063	
	1997A	3/4"	R064	
	1998A	7/8"	R065	
	1999A	1"	R066	
	19910A	1-1/8"	R067	
	19912A	1-3/8"	R068	
	19914A	1-5/8"	R069	
	19917A	2-1/8"	R070	
	19919A	2-5/8"	R071	
		3-1/8"	R072	

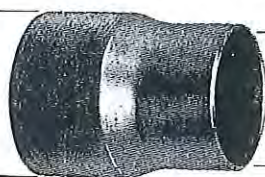
 <p style="text-align: center;">REDUCING SOLDER COUPLINGS/UNIONS</p> <p style="text-align: center;">INSIDE DIA. "D" INSIDE DIA. "E"</p>							
INSIDE DIAM. TO INSIDE DIAM. FEMALE TO FEMALE – SOLDER							
CAT. NO.	INSIDE DIA. D	INSIDE DIA. E	IDEAL P/N	CAT. NO.	INSIDE DIA. D	INSIDE DIA. E	IDEAL P/N
19930A	3/8"	1/4"	R110	19991A	1-1/8"	1"	R124
19931A	1/2"	3/8"	R111	19949A	1-3/8"	5/8"	R125
19989A	5/8"	3/8"	R112	19951A	1-3/8"	7/8"	R126
19932A	5/8"	1/2"	R113	19953A	1-3/8"	1-1/8"	R127
19933A	3/4"	3/8"	R114	19959A	1-5/8"	1-1/8"	R128
19934A	3/4"	1/2"	R115	19960A	1-5/8"	1-3/8"	R129
11935A	3/4"	5/8"	R116	19996A	2-1/8"	1-1/8"	R130
11936A	7/8"	1/2"	R117	19967A	2-1/8"	1-3/8"	R131
11937A	7/8"	5/8"	R118	19968A	2-1/8"	1-5/8"	R132
11938A	7/8"	3/4"	R119	19998A	2-5/8"	1-3/8"	R134
11943A	1-1/8"	1/2"	R120	19999A	2-5/8"	1-5/8"	R135
11944A	1-1/8"	5/8"	R121	19975A	2-5/8"	2-1/8"	R133
11945A	1-1/8"	3/4"	R122		3-1/8"	2-5/8"	R136
11946A	1-1/8"	7/8"	R123				

LINE FITTINGS - COPPER

COPPER REDUCING BUSHES

O.D.
MALE END

OUTSIDE
DIA.
"A"



INSIDE
DIA.
"B"

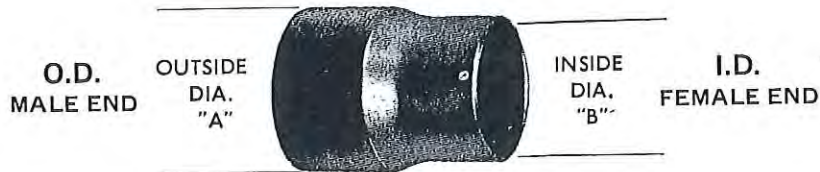
I.D.
FEMALE END

O.D.		I.D.		O.D.		I.D.		O.D.		I.D.		O.D.		I.D.					
CAT. NO.	DIMS "A"	DIMS "B"	HELDON	HUDSON	CAT. NO.	DIMS "A"	DIMS "B"	HELDON	HUDSON	CAT. NO.	DIMS "A"	DIMS "B"	HELDON	HUDSON	CAT. NO.	DIMS "A"	DIMS "B"	HELDON	HUDSON
2001	3/8"	1/4"	5277	W24007	20051	1-1/2"	1-3/8"	5227	—	200105	2-5/8"	1-3/8"	5235	—					
2002	1/2"	1/4"	5275	—	20052	1-1/2"	2"	5283	—	200106	2-5/8"	1-1/2"	5270	—					
2003	1/2"	3/8"	5278	W24011	20053	1-9/16"	1-7/8"	4989	—	200107	2-5/8"	1-5/8"	5209	W24062					
2004	5/8"	3/8"	5296	W24015	20054	1-5/8"	5/8"	5289	—	200108	2-5/8"	2"	5288	—					
2005	5/8"	1/2"	5213	W24016	20059	1-5/8"	1-1/8"	5204	W24044	200109	2-5/8"	2-1/8"	5210	W24064					
2006	5/8"	7/8"	4977	W240171	20060	1-5/8"	1-1/4"	5257	—	200110	2-5/8"	3-1/2"	4961	—					
2007	5/8"	1-1/8"	5268	W240172	20061	1-5/8"	1-3/8"	5220	W24046	200111	2-7/8"	1-5/8"	4995	—					
2008	3/4"	1/2"	5200	—	20062	1-5/8"	1-1/2"	5222	—	200112	2-7/8"	2-1/8"	5285	—					
2009	3/4"	5/8"	5219	W24020	20063	1-5/8"	1-3/4"	5223	W24041	200117	3"	1-5/8"	5280	—					
20010	3/4"	1-1/8"	4987	—	20064	1-3/4"	7/8"	4963	—	200118	3"	2"	5239	—					
20011	7/8"	1/2"	5246	—	20065	1-3/4"	1"	5290	—	200119	3"	2-1/8"	5248	—					
20012	7/8"	5/8"	5264	W24026	20066	1-3/4"	1-1/8"	4990	—	200120	3"	2-1/2"	5211	—					
20013	7/8"	3/4"	5249	W24027	20067	1-3/4"	1-3/8"	5265	—	200121	3"	2-5/8"	5262	—					
20014	7/8"	1-1/8"	5255	—	20068	1-7/8"	1-1/8"	4982	—	200122	3"	2-7/8"	4981	—					
20015	7/8"	1-3/8"	5267	—	20069	1-7/8"	1-1/2"	4970	—	200123	3-1/8"	1-5/8"	5266	—					
20016	7/8"	1-1/2"	4976	—	20070	1-7/8"	1-5/8"	4971	—	200124	3-1/8"	2-1/8"	5238	—					
20017	1"	1/4"	4973	—	20071	1-15/16"	1-1/8"	4998	—	200125	3-1/8"	2-5/8"	5237	—					
20018	1"	1/2"	5212	—	20072	2"	3/4"	5229	—	200126	3-1/8"	2-7/8"	5293	—					
20019	1"	5/8"	5273	—	20073	2"	1"	5216	—	200127	3-1/8"	3"	5274	—					
20020	1"	3/4"	5201	W24028	20074	2"	1-1/8"	5243	—	200128	3-1/8"	3-1/4"	5294	—					
20021	1"	7/8"	4964	W24029	20075	2"	1-1/4"	5231	—	200129	3-1/4"	2-1/8"	5230	—					
20022	1-1/8"	1/2"	5279	W24030	20076	2"	1-3/8"	5251	—	200130	3-1/4"	2-5/8"	4999	—					
20023	1-1/8"	5/8"	5272	W24031	20077	2"	1-1/2"	5205	—	200131	3-1/4"	3-1/8"	5240	—					
20024	1-1/8"	3/4"	5218	W24032	20078	2"	1-5/8"	5291	—	200132	3-1/2"	2-1/8"	4985	—					
20025	1-1/8"	7/8"	5224	W24033	20079	2"	1-3/4"	5287	—	200133	3-1/2"	2-5/8"	5260	—					
20030	1-1/8"	1"	5242	W24034	20080	2"	1-13/16"	5299	—	200134	3-1/2"	3"	5250	—					
20031	1-1/8"	1-1/8"	5254	—	20081	2"	1-7/8"	5298	—	200135	3-1/2"	3-1/8"	5241	—					
20032	1-1/8"	1-3/8"	4980	—	20082	2"	2-1/8"	4968	—	200136	3-1/2"	3-1/4"	5281	—					
20033	1-1/4"	1/2"	5284	—	20083	2-1/8"	1-1/8"	5206	—	200137	3-5/8"	2-1/8"	5297	—					
20034	1-1/4"	5/8"	5269	—	20088	2-1/8"	1-3/8"	5221	W24054	200138	3-5/8"	2-5/8"	5256	—					
20035	1-1/4"	3/4"	5252	—	20089	2-1/8"	1-1/2"	4984	—	200139	3-5/8"	3"	4975	—					
20036	1-1/4"	7/8"	5253	—	20090	2-1/8"	1-5/8"	5207	W24056	200140	3-5/8"	3-1/8"	4965	—					
20037	1-1/4"	1"	5202	W24047	20091	2-1/8"	1-3/4"	5276	—	200141	3-5/8"	3-1/2"	5286	—					
20038	1-1/4"	1-1/8"	4986	W24048	20092	2-1/8"	1-7/8"	4988	—	200146	3-3/4"	3-1/2"	4991	—					
20039	1-3/8"	5/8"	5295	—	20093	2-1/8"	2"	4997	—	200147	4-1/8"	2-5/8"	4969	—					
20040	1-3/8"	3/4"	5245	—	20094	2-1/8"	2-3/8"	4959	—	200148	4-1/8"	3-5/8"	4994	—					
20041	1-3/8"	7/8"	5228	W24036	20095	2-1/8"	2-5/8"	4966	—	200149	4-1/8"	4"	4992	—					
20042	1-3/8"	1"	5259	W24037	20096	2-1/4"	2"	5232	—	200150	4-1/4"	3-5/8"	4983	—					
20043	1-3/8"	1-1/8"	5217	W24038	20097	2-3/8"	3"	4978	—	200151	4-1/2"	2-5/8"	4993	—					
20044	1-3/8"	1-1/4"	5282	W24039	20098	2-1/2"	1-1/4"	5215	—	200152	4-5/8"	4-1/2"	4932	—					
20045	1-1/2"	1/2"	5225	—	20099	2-1/2"	1-1/2"	5233	—	200153	4-3/4"	3-1/2"	4958	—					
20046	1-1/2"	3/4"	5226	W240387	200100	2-1/2"	2"	5208	—	200154	5"	3"	4934	—					
20047	1-1/2"	7/8"	5271	—	200101	2-1/2"	2-1/8"	4974	—	200155	5"	3-1/2"	4931	—					
20048	1-1/2"	1"	5214	W240389	200102	2-1/2"	2-3/8"	4979	—	200156	5"	4"	4960	—					
20049	1-1/2"	1-1/8"	5258	—	200103	2-1/2"	2-5/8"	5263	—	SIZES NOT LISTED AVAILABLE ON REQUEST									
20050	1-1/2"	1-1/4"	5203	—	200104	2-5/8"	1-1/8"	5234	—										

3

IDEAL LINE FITTINGS - COPPER

COPPER REDUCING BUSHES



OUTSIDE DIAM. TO INSIDE DIAM. O.D. MALE TO I.D. FEMALE SOLDER CONNECTIONS			
CAT. NO.	O.D. DIM. A	I.D. DIM. B	IDEAL P/N
2001A	3/8"	1/4"	R075
2002A	1/2"	1/4"	R076
2003A	1/2"	3/8"	R077
2004A	5/8"	3/8"	R078
2005A	5/8"	1/2"	R079
2008A	3/4"	1/2"	R080
2009A	3/4"	5/8"	R081
	7/8"	3/8"	R082
2011A	7/8"	1/2"	R083
20012A	7/8"	5/8"	R084
20013A	7/8"	3/4"	R085
20022A	1-1/8"	1/2"	R086
20023A	1-1/8"	5/8"	R087
20024A	1-1/8"	3/4"	R088
20025A	1-1/8"	7/8"	R089
20039A	1-3/8"	5/8"	R090
20041A	1-3/8"	7/8"	R091
20043A	1-3/8"	1-1/8"	R092
	1-5/8"	7/8"	R093
20059A	1-5/8"	1-1/8"	R094
20061A	1-5/8"	1-3/8"	R095
20083A	2-1/8"	1-1/8"	R096
20088A	2-1/8"	1-3/8"	R097
20090A	2-1/8"	1-5/8"	R098
200109A	2-5/8"	2-1/8"	R099

PRODUCT PRICE AND QUALITY

SOMETIMES PRICES OF SIMILAR PRODUCTS, BUT OF DIFFERENT BRANDS MAY VARY
THE MOST EXPENSIVE IS NOT ALWAYS THE BEST
QUALITY IS THE CRITERIA

ALL ACTROL PARTS PRODUCTS OFFERED ARE TOP QUALITY IRRESPECTIVE OF BRAND OR PRICE

LINE FITTINGS - COPPER

**90° COPPER ELBOWS
FEMALE TO FEMALE**



To Take O.D. of Copper Pipe
SAME SIZE BOTH ENDS

**45° COPPER ELBOWS
FEMALE TO FEMALE**



To Take O.D. of Copper Pipe

**90° COPPER ELBOWS
MALE TO FEMALE**



To Take O.D. of Copper Pipe one
end and I.D. other end.

3

CAT. NO.	INSIDE DIAM.	HELDON	HUDSON	CAT. NO.	INSIDE DIAM.	HELDON	HUDSON	CAT. NO.	O.D.	I.D.	HELDON	HUDSON
2011	1/4"	5000	W20000	20134	3/8"	5302	W20203	20159	3/8"	3/8"	5352	W20410
2012	5/16"	5001	W20002	20135	1/2"	5304	W20204	20160	1/2"	1/2"	5354	W20412
2013	3/8"	5002	W20005	20136	5/8"	5305	W20205	20161	5/8"	5/8"	5355	W20415
2015	1/2"	5004	W20009	20137	3/4"	5306	W20206	20162	3/4"	3/4"	5356	W20417
2017	5/8"	5005	W20014	20138	7/8"	5307	W20207	20163	7/8"	5/8"	5386	—
20110	3/4"	5006	W20022	20139	1"	5308	W20208	20164	7/8"	7/8"	5357	W20420
20112	7/8"	5007	W20028	20140	1-1/8"	5309	W20209	20165	1"	1"	5358	—
20115	1"	5008	W20033	20141	1-1/4"	5310	W20210	20166	1-1/8"	1-1/8"	5359	W20422
20117	1-1/8"	5009	W20043	20142	1-3/8"	5311	W20211	20167	1-1/4"	1-1/4"	5360	—
20118	1-1/4"	5010	W20100 *	20143	1-1/2"	5312	W20212	20168	1-3/8"	1-3/8"	5361	W20430
20119	1-3/8"	5011	W20310	20144	1-5/8"	5313	W20213	20169	1-1/2"	1-1/2"	5362	—
			and W20108 *	20145	1-3/4"	5314	W20214	20170	1-5/8"	1-5/8"	5363	W20440
20120	1-1/2"	5012	W20115 *	20146	2"	5316	W20216	20171	1-3/4"	1-3/4"	5364	—
			W20315	20147	2-1/8"	5317	W20217	20172	2"	2"	5366	—
20121	1-5/8"	5013	and W20126 *	20148	2-1/2"	5320	W20220	20173	2-1/8"	2-1/8"	5367	—
			20149	2-5/8"	5321	W20221	20174	2-1/2"	2-1/2"	5370	—	
20122	1-3/4"	5014	—	20150	3"	5324	W20224	20175	2-5/8"	2-5/8"	5371	—
20123	2"	5016	W20135 *	—	3-1/8"	5325	—	20176	3"	3"	5374	—
20124	2-1/8"	5017	W20320	20151	3-1/4"	5326	W20226	20177	3-1/2"	3-1/2"	5377	—
			and W20149 *	20152	3-1/2"	5327	W20228	—	3-5/8"	3-5/8"	5394	—
201156	2-3/8"	—	W20151 *	—	3-5/8"	5344	—	—	—	—	—	
20125	2-1/2"	5020	W20152 *	—	—	—	—	—	—	—	—	
20126	2-5/8"	5021	W20325	—	—	—	—	—	—	—	—	—
			and W20159 *	—	—	—	—	—	—	—	—	—
20127	3"	5024	W20165 *	—	—	—	—	—	—	—	—	
—	3-1/8"	5025	—	—	—	—	—	—	—	—	—	
20128	3-1/4"	5026	—	—	—	—	—	—	—	—	—	
20129	3-1/2"	5027	W20170 *	—	—	—	—	—	—	—	—	
—	3-5/8"	5044	—	—	—	—	—	—	—	—	—	
20130	3-3/4"	5028	—	—	—	—	—	—	—	—	—	
20131	4"	5029	W20180 *	—	—	—	—	—	—	—	—	
—	5"	5046	—	—	—	—	—	—	—	—	—	
—	6"	5048	—	—	—	—	—	—	—	—	—	

* Long Radii.

REDUCING ONE END

CAT. NO.	I.D.	I.D.	Heldon	Hudson
2014	1/2"	3/8"	5034	W20008
2016	5/8"	1/2"	5035	W20013
2018	3/4"	1/2"	5036	W20020
2019	3/4"	5/8"	5037	W20021
20111	7/8"	3/4"	5038	W20027
20113	1"	3/4"	5039	W20031
20114	1"	7/8"	5041	—
20116	1-1/8"	1"	5042	—

NOW FOR EVEN FASTER SERVICE WE HAVE INSTALLED TELEX SERVICE IN MOST OF OUR BRANCHES


TO GIVE OUR CUSTOMERS EVEN FASTER SERVICE WE HAVE INSTALLED TELEX IN MOST OF OUR BRANCHES. IF YOU HAVE TELEX YOU CAN SEND YOUR ORDER DIRECT BY THIS MEANS. OUR BRANCH TELEX NUMBERS ARE LISTED AT THE FRONT OF THIS CATALOGUE

TELEPHONE YOUR ORDERS

We are as near as your nearest telephone.

IDEAL LINE FITTINGS - COPPER

<p>90° COPPER ELBOWS FEMALE TO FEMALE</p> 	TO TAKE O.D. OF COPPER PIPE SAME SIZE BOTH ENDS FEMALE TO FEMALE – SOLDER		
	CAT. NO.	INSIDE DIAM.	IDEAL P/N
	2011A	1/4"	R000
	2013A	3/8"	R001
	2015A	1/2"	R002
	2017A	5/8"	R003
	20110A	3/4"	R004
	20112A	7/8"	R005
	20115A	1"	R006
	20117A	1-1/8"	R007
	20118A	1-1/4"	R008
	20119A	1-3/8"	R009
	20120A	1-1/2"	R010
	20121A	1-5/8"	R011
	20124A	2-1/8"	R012
	20126A	2-5/8"	R013
		3-1/8"	R014
20131A	4"	R015	
	6"	R016	

<p>45° COPPER ELBOWS FEMALE TO FEMALE</p> 	TO TAKE O.D. OF COPPER PIPE SAME SIZE BOTH ENDS FEMALE TO FEMALE – SOLDER		
	CAT. NO.	INSIDE DIAM.	IDEAL P/N
	20134A	3/8"	R020
	20135A	1/2"	R021
	20136A	5/8"	R022
	20137A	3/4"	R023
	20138A	7/8"	R024
	20140A	1-1/8"	R025
	20142A	1-3/8"	R026
	20144A	1-5/8"	R027
	20147A	2-1/8"	R028
	20149A	2-5/8"	R029
		3-1/8"	R030

WE CAN HANDLE YOUR ORDERS AS FAST AND AS CAREFULLY AS WE CAN
 WE TRY TO GIVE YOU THE VERY BEST SERVICE
 NAME IT AND WE'VE PROBABLY GOT IT IN OUR WIDELY ASSORTED STOCK

LINE FITTINGS - COPPER

COPPER RETURN BENDS



NOT SWAGED
(Tube to Tube)



OD IS REDUCED TO FIT A SPECIFIED
BORE SIZE (Male to Male)



SWAGED TO TAKE OD OF COPPER PIPE
(Female to Female)

CAT. NO.	O.D.	Centres	Heldon	Hudson
2021	3/8"	2-1/4"	5410	—
2022	1/2"	1-5/16"	5423	—
2023	1/2"	1-1/2"	5428	W24710
2024	1/2"	1.8"	5422	—
2025	1/2"	2"	5404	—
2026	1/2"	2-1/2"	5411	—
2027	1/2"	3-1/8"	5412	—
—	5/8"	1- ²⁵ / ₆₄ "	—	W24725*
—	5/8"	1- ²⁵ / ₆₄ "	—	W24727*
—	5/8"	1-3/4"	—	W24731
2028	5/8"	1.8"	5409	—
2029	5/8"	1-7/8"	5401	—
20210	5/8"	2"	5400	W24733
20211	5/8"	2-1/32"	5408	—
20212	5/8"	2-1/2"	5414	W24735
20213	5/8"	3"	5413	—
20214	5/8"	3-1/2"	5405	—
20215	3/4"	1.8"	5415	—
20216	3/4"	2"	5416	—
20217	3/4"	2-1/4"	5402	—
20218	3/4"	2-3/4"	5419	—
20219	3/4"	3-1/2"	5406	—
20220	7/8"	2-1/4"	5417	—
20221	1"	2-1/4"	5403	—
20222	1-1/8"	2-7/16"	5425	—

* Depth = 1-1/8"
** Depth = 1-1/4"

CAT. NO.	O.D.	Centres	Heldon	Hudson
20223	3/8"	2-1/4"	5440	—
20224	1/2"	1-5/16"	5453	—
20225	1/2"	1-1/2"	5458	—
20230	1/2"	1.8"	5452	—
20231	1/2"	2"	5434	—
20232	1/2"	2-1/2"	5441	—
20233	1/2"	3-1/8"	5442	—
—	.550"	1.8"	—	W24632
—	.550"	2"	—	W24633
20234	5/8"	1.8"	5439	—
20235	5/8"	1-7/8"	5431	—
20236	5/8"	2"	5430	W24651
20237	5/8"	2-1/32"	5438	—
20238	5/8"	2-1/2"	5444	—
20239	5/8"	3"	5443	—
20240	5/8"	3-1/2"	5435	—
20241	3/4"	1.8"	5445	—
20242	3/4"	2"	5446	—
20243	3/4"	2-1/4"	5432	—
20244	3/4"	2-3/4"	5449	—
20245	3/4"	3-1/2"	5436	—
20246	7/8"	2-1/4"	5447	—
20247	1"	2-1/4"	5433	—
20248	1-1/8"	2-7/16"	5455	—

CAT. NO.	Centres	Centres	Heldon	Hudson
20249	3/8"	2-1/4"	5470	W24517
20250	1/2"	1-5/16"	5483	—
20251	1/2"	1-1/2"	5488	W24518
20252	1/2"	1.8"	5482	—
20253	1/2"	2"	5464	W24520
20254	1/2"	2-1/2"	5471	—
20259	1/2"	3-1/8"	5472	—
—	5/8"	1-3/4"	—	W24530
20260	5/8"	1.8"	5469	—
20261	5/8"	1-7/8"	5461	—
20262	5/8"	2"	5460	W24533
20263	5/8"	2-1/32"	5468	—
20264	5/8"	2-1/2"	5474	W24540
20265	5/8"	3"	5473	—
—	5/8"	3-1/4"	—	W24537
20266	5/8"	3-1/2"	5465	—
20267	3/4"	1.8"	5475	—
—	3/4"	1-7/8"	—	W24544
20268	3/4"	2"	5476	W24545
20269	3/4"	2-1/4"	5462	W24546
20270	3/4"	2-3/4"	5479	—
20271	3/4"	3-1/2"	5466	W24555
20272	7/8"	2-1/4"	5477	—
—	7/8"	3-1/2"	—	W24570
—	1"	2"	—	W24575
20273	1"	2-1/4"	5463	—
20274	1-1/8"	2-7/16"	5485	—
—	1-1/8"	3-1/2"	—	W24590

3

PLASTIC END CAPS FOR COPPER TUBE (To fit inside end of tube)

CAT. NO.	TUBE OD
202114	1/4"
202115	3/8"
202116	1/2"
202117	5/8"
202118	3/4"
202119	7/8"
202120	1"
202121	1-1/8"
202124	1-1/4"
202122	1-3/8"
202125	PM4

COPPER TUBE END CAPS (STOP ENDS)



To Take O.D. of Copper Pipe

CAT. NO.	O.D.	Heldon	Hudson
20288	3/8"	66150	W24302
20289	1/2"	66100	W24303
20290	5/8"	66152	W24304
20291	3/4"	66102	W24305
20292	7/8"	66153	W24306
20293	1"	66103	W24307
20294	1-1/8"	66130	W24308
20295	1-1/4"	66104	W24309

CAT. NO.	O.D.	Heldon	Hudson
20296	1-3/8"	66131	W24310
20297	1-1/2"	66154	W24311
20298	1-5/8"	66132	W24312
20299	1-3/4"	66155	—
202100	1-7/8"	66140	—
202101	2"	66115	W24313
202102	2-1/8"	66133	W24314
202103	2-3/8"	66119	—
202104	2-1/2"	66118	—
202105	2-5/8"	66134	W24316
202106	2-7/8"	66121	—
202107	3"	66122	—
202108	3-1/8"	66135	—
202109	3-1/4"	66136	—
202110	3-1/2"	66156	—
202111	4"	66157	W24325
202112	5"	66120	—
202113	6"	66151	—

LINE FITTINGS - COPPER

WROUGHT COPPER TEES



To Take O.D. of Copper Pipe.

LINE 1, 2 & BRANCH - SAME (Female)					
CAT. NO.	1, 2, 3	Heldon P/N	Hudson P/N	IDEAL	
				CAT. NO.	P/N
2031	3/16"	6003	W21493		
2032	1/4"	6000	W21500	2032A	R140
2033	5/16"	6001	W21503		
2034	3/8"	6002	W21505	2034A	R141
2035	1/2"	6004	W21510	2035A	R142
2036	5/8"	6005	W21520	2036A	R143
2037	3/4"	6006	W21530	2037A	R144
2038	7/8"	6007	W21540	2038A	R145
2039	1"	6008	W21567	2039A	R146
20310	1-1/8"	6009	W21551	20310A	R147
20311	1-1/4"	6010	W21566		
20312	1-3/8"	6011	W21568	20312A	R148
20313	1-1/2"	6012	W21583		
20314	1-5/8"	6013	W21584		
20315	1-3/4"	6014	—		
20316	2"	6016	W21601		
20317	2-1/8"	6017	W21602		
20318	2-1/2"	6020	W21622		
20319	2-5/8"	6021	W21623		
20320	3"	6024	—		
20321	3-1/8"	6025	W21652		
20322	3-1/4"	6026	—		
20323	3-1/2"	6027	—		
20324	3-5/8"	6028	W21660		
20325	4"	6029	—		
20326	4-1/8"	6034	W21670		

REDUCING ON BRANCH				
CAT.NO.	LINE 1, 2	BRANCH 3	HELDON	HUDSON
20329	1/4"	3/16"	—	W21499
20330	5/16"	1/4"	6101	W21504
20331	3/8"	1/4"	6102	W21506
20327	3/8"	5/16"	—	W21508
20332	1/2"	1/4"	6103	W21515
20333	1/2"	3/8"	6104	W21511
20328	5/8"	1/4"	—	W21523
20376	5/8"	3/8"	—	W21522
20334	5/8"	1/2"	6105	W21521
20335	3/4"	3/8"	6140	W21533
20336	3/4"	1/2"	6135	W21532
20337	3/4"	5/8"	6106	W21531
20338	7/8"	3/4"	6107	—
20377	1"	1/2"	—	W21550
20378	1"	3/4"	—	W21549
20339	1"	7/8"	6108	—
20340	1-1/8"	1"	6109	—
20341	1-1/4"	1-1/8"	6110	—
20342	1-3/8"	1-1/4"	6111	—
20343	1-1/2"	1-3/8"	6112	—
20344	1-5/8"	1-1/2"	6113	—
20345	1-3/4"	1-5/8"	6114	—
20346	2"	1-7/8"	6116	—
20347	2-1/8"	2"	6117	—
20348	2-1/2"	2-3/8"	6120	—
20349	2-5/8"	2-1/2"	6121	—
20350	3"	2-7/8"	6124	—
20351	3-1/2"	3-3/8"	6127	—

INCREASING ON BRANCH				
CAT. NO.	LINE 1, 2	BRANCH 3	HELDON	HUDSON
20353	1/4"	5/16"	—	W21501
20354	5/16"	3/8"	—	W21509
20355	3/8"	1/2"	—	W21514
20356	1/2"	5/8"	—	W21527
20357	5/8"	3/4"	—	W21536
20358	3/4"	1"	—	W21547

INCREASING ON LINE & BRANCH				
CAT. NO.	LINE 1	L & B 2, 3	HELDON	HUDSON
20361	3/16"	1/4"	—	W21496
20362	3/16"	5/16"	—	W21497
20363	3/8"	1/2"	—	W21512
20364	1/2"	5/8"	—	W21524

REDUCING ON LINE & BRANCH				
CAT.NO.	LINE 1	L & B 2, 3	HELDON	HUDSON
20382	5/16"	3/16"	—	W21495
20383	5/16"	1/4"	—	W21502
20384	3/8"	1/4"	—	W21507
20385	3/4"	1/2"	—	W21537

Y PIECE (3 WAY CONNECTORS)				
CAT.NO.	'A'	'B'	HELDON	HUDSON
20366	5/8"	5/8"	6501	—
20367	3/4"	5/8"	6503	—
20368	7/8"	5/8"	6502	W22350
20369	1"	5/8"	6504	—
20370	1"	3/4"	6508	—
20371	1-1/8"	5/8"	6505	—
20372	1-1/8"	3/4"	6509	—
20373	1-1/8"	7/8"	6500	W22360
20374	1-1/4"	5/8"	6506	—
20375	1-3/8"	5/8"	6507	—



To Take O.D. of Copper Pipe.

NOTES

3

TELEX FOR FAST SERVICE
TO GIVE OUR CUSTOMERS EVEN FASTER SERVICE WE HAVE INSTALLED TELEX IN MOST OF OUR BRANCHES. IF YOU ARE A TELEX SUBSCRIBER YOU CAN SEND YOUR ORDER DIRECT BY TELEX. TELEX NUMBERS ARE LISTED AT THE FRONT OF THIS CATALOGUE.

NOTES

PICK-UP COUNTERS EVERYWHERE

AS WE GO TO PRESS THERE ARE 30 LARGE WAREHOUSES THROUGHOUT AUSTRALIA WITH STOCK FOR IMMEDIATE PICK-UP INCLUDING FAST COUNTER SERVICE. THE COMPLETE LISTING IS AT THE FRONT OF THIS CATALOGUE. IN MOST CASES THESE BRANCHES ARE IN LOCATIONS WITH FREE PARKING.

SCHRADER/ACCESS VALVES & FITTINGS

THESE ACCESS FITTINGS MAKE IT POSSIBLE TO QUICKLY AND INEXPENSIVELY INSTALL A PERMANENT ACCESS PORT ON ANY REFRIGERATION SYSTEM TO FACILITATE SERVICING, CHARGING, EVACUATING, TESTING, ETC.

HALF UNION TYPE :



CAT.NO	MAKE	P/N	DESCRIPTION
20782A	IMPERIAL	GU1-4A	1/4"OD Tube 1/8"NPT
20782	ROBINAIR	40400	1/8"MPT or 1/4"OD Sold.
20751	"	40401	1/4" 5/16" " "
20757	HUDSON	2825	1/8" MBSP
20758	"	CO32311	.224"MS W/o Core & Cap.
20770	HELDON	11093	1/4 MF x 1/4 OD

SOLDER UNION TYPE :



20778A	IMPERIAL	GUS3-4	1/4"
20773	ROBINAIR	40416	1/8" OD
20752	ROBINAIR	40417	3/16" OD
20778	ROBINAIR	40418	1/4" OD
20753	ROBINAIR	40419	5/16" OD
20754	ROBINAIR	40420	3/8" OD

MULTI-SIZE SOLDER UNION :



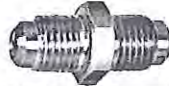
20783A	IMPERIAL	GUS3-34	3/16OD or 1/4 Sold. Fitting
20784A	IMPERIAL	GUS3-46	1/4 OD or 3/8 Sold. Fitting
20785A	IMPERIAL	GUS3-58	5/16OD or 1/2 Sold. Fitting
20786A	IMPERIAL	GUS3-68	3/8 OD or 1/2 Sold. Fitting
20787A	IMPERIAL	GUS3-346	3/16OD or 1/4 or 3/8 S/Fitt.
20783	ROBINAIR	40426	3/16OD or 1/4 Sold. Fitting
20784	ROBINAIR	40427	1/4 OD or 3/8 Sold. Fitting
20787	ROBINAIR	40435	3/16OD or 1/4 or 3/8 S/Fitt.
20785	ROBINAIR	40428	5/16OD or 1/2 Sold. Fitting
20786	ROBINAIR	40429	3/8 OD or 1/2 Sold. Fitting

FEMALE FLARE COUPLING WITH COPPER GASKET :



207114	ROBINAIR	40410	1/4" Male Flare Conn.
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MALE FLARE UNION WITH FORGED NUT :



207115	ROBINAIR	40404	For 1/4OD Flared Tube
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STANDARD SOLDER TYPE TEE - ACCESS ON BRANCH :



20779A	IMPERIAL	GT2-4	1/4 OD Tube or 3/8 Sold.Fitt.
20780A	IMPERIAL	GT2-6	3/8 OD Tube or 1/2 Sold.Fitt.
20779	ROBINAIR	40382	1/4 OD Tube or 3/8 Sold.Fitt.
20772	ROBINAIR	40383	5/16OD Tube or 3/8 Sold.Fitt.
20780	ROBINAIR	40384	3/8 OD Tube or 1/2 Sold.Fitt.
20774	ROBINAIR	40390	1/4SAE M.FI.&1/8MPT on run
20771	HELDON	9767	1/4 Flare x 1/4 Flare

HELDON COMPRESSION UNIONS

20764	26045	1/4 x 5/32
20765	26060	1/4 x 3/16
20767	9508	1/4 x 1/4
20766	9555	5/16 x 1/4
20768	9552	5/16 x 5/16

REFER TECH. PAGE 207-a FOR IMPERIAL & ROBINAIR PART NO. CROSS REFERENCE OLD TO NEW - NEW TO OLD

VALVE CORE REMOVER :



CAT.NO	MAKE	P/N	DESCRIPTION
207107	IMPERIAL	G6300	
207116	ROBINAIR	40535	
20781	"	40536	With 6 Valve Cores.

REPLACEMENT VALVE CORES :



207106	IMPERIAL	G6400	
207120	ROBINAIR	40352	Bag of 6 Cores.
20759	HUDSON	5344	HELDON 8864

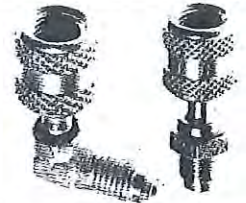
ROBINAIR QUICK SEAL CAPS



Finger tight sealing of 1/4" and 3/8" male flare connections. No wrenches or pliers required. Same gaskets as charging lines.

207118	40572	Bag of 6 Quick Seal Caps
20762	40083	6 Replacement Gaskets for above

ROBINAIR QUICK COUPLER VALVE OPENER TYPE



These adapters are designed to "upset" Schrader type access valves. All adapt to 1/4" SAE.

19827	40560	Straight 1/4" SAE
19826	40563	90° Elbow Flare
19846	10462	45° Elbow Connections
20762	40083	6 Replacement Gaskets

90° SWIVEL ADAPTER

A 90° swivel adapter may be used for many applications. It eliminates awkward bending of charging lines when connecting charging or testing units in hard to reach places. Adapter has 1/4" Kwik-Kupler connection with valve core on one end and 1/4" male flare on the other end.



20775	IMPERIAL	10-C	90° Swivel Adaptor.
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ROBINAIR QUICK COUPLER STYLE VALVE WITH VALVE DEPRESSOR.



207121	40379	1/4 Male Flare x 1/4 Female Flare Quick Coupler.
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SWIVEL TEE 1/4 FLARE TYPE 2 MALE FLARE - 1 FEMALE FLARE SWIVEL



20755	ROBINAIR	40396	Access on branch, Female Swivel on one end of run
20756	ROBINAIR	40399	Access on one end of run Female Swivel on Branch

COPPER TO COPPER BRAZED LINE TAP VALVE



Steel pin with core penetrates line and is locked into valve body in one operation, simply by tightening cap.

CAT. NO.	IMPERIAL P/N	DESCRIPTION
207101	GPS3 - 4	1/4 O.D. Tube
207102	GPS3 - 5	5/16 O.D. Tube
207103	GPS3 - 6	3/8 O.D. Tube
207104	GPS3 - 8	1/2 O.D. Tube
207105	GPS3 - 10	5/8 O.D. Tube

IMPERIAL & ROBINAIR CROSS REFERENCE

OLD TO NEW - NEW TO OLD

ROBINAIR

IMPERIAL

OLD	NEW	NEW	OLD
4610-2	40552	10462	SAME
4610-4A	40553	10468	SAME
4610-4B	40555	10469	SAME
4610-6	40554	40082	CH-100-6
4610-S4	40560	40083	CH-109-6
4615-2	40561	40084	CH-110
4615-S4	40563	40106	CM-1
4620-4	40569	40288	HP-41
4620-4-6	40572	40289	HP-41A
4620-4AC	40570	40303	HP-810
4620-6	40571	40306	HP-810-8-3
10462	SAME	40330	QP-14
10468	SAME	40336	QP-810
10469	SAME	40351	VC-5344
10551	40535	40352	VC-5344-6
CH-100-6	40082	40359	VPS3-4
CH-109-6	40083	40360	VPS3-5
CH-110	40084	40361	VPS3-6
CM-1	40106	40363	VPS3-8
HP-41	40288	40365	VPS3-10
HP-41A	40289	40369	VQ-4AS
HP-810	40303	40371	VQF-4S
HP-810-8-3	40306	40372	VQF-4AS
QP-14	40330	40373	VQ-4BS
QP-810	40336	40379	VQ-4S
V6S-AA	40527	40382	VT2-4
V6300	40535	40383	VT2-5
V6301	40536	40384	VT2-6
VC-5344	40351	40390	VT3-4A
VC-5344-6	40352	40396	VTS4-4
VPS3-4	40359	40398	NONE
VPS3-5	40360	40399	VTS6-4
VPS3-6	40361	40400	VU1-4A
VPS3-8	40363	40401	VU1-4B
VPS3-10	40365	40404	VU2-4
VQ-4S	40379	40410	VUR3-44
VQ-4AS	40369	40416	VUS3-2
VQ-4BS	40373	40417	VUS3-3
VQF-4AS	40372	40418	VUS3-4
VQF-4S	40371	40419	VUS3-5
VT2-4	40382	40420	VUS3-6
VT2-6	40384	40426	VUS3-34
VT2-5	40383	40427	VUS3-46
VT3-4A	40390	40428	VUS3-58
VTS4-4	40396	40429	VUS3-68
VTS6-4	40399	40435	VUS3-346
VU1-4A	40400	40527	V6S-AA
VU1-4B	40401	40535	V6300
VU2-4	40404	40535	10551
VUR3-44	40410	40536	V6301
VUS3-2	40416	40552	4610-2
VUS3-3	40417	40553	4610-4A
VUS3-4	40418	40554	4610-6
VUS3-5	40419	40555	4610-4B
VUS3-6	40420	40560	4610-S4
VUS3-34	40426	40561	4615-2
VUS3-46	40427	40563	4615-S4
VUS3-58	40428	40569	4620-4
VUS3-68	40429	40570	4620-4AC
VUS3-346	40435	40571	4620-6
NONE	40398	40572	4620-4-6

OLD	NEW
VU1-4A	GU1-4A
VU1-4B	GU1-4B
VUS3-2	GUS3-2
VUS3-3	GUS3-3
VUS3-4	GUS3-4
VUS3-5	GUS3-5
NONE	GUS3-6
VUS3-34	GUS3-34
VUS3-46	GUS3-46
VUS3-58	GUS3-58
VUS3-68	GUS3-68
VUS3-346	GUS3-346
VT2-4	GT2-4
NONE	GT2-5
NONE	GT2-6
NONE	GT2-10
NONE	GT2-456
(QC-4R) V6300	G6300

SOME ROBINAIR & IMPERIAL EQUIVALENTS

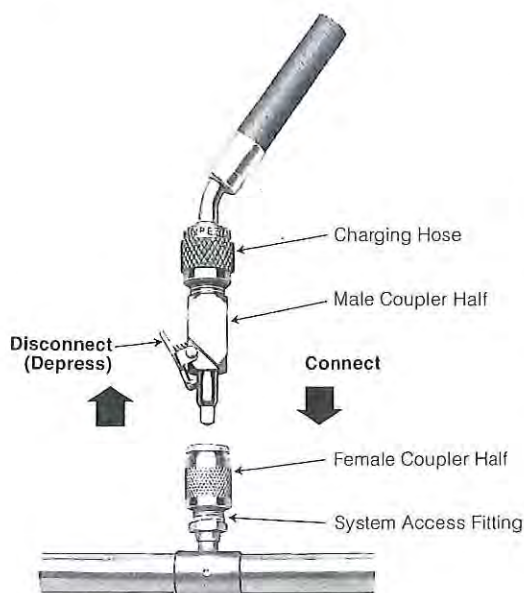
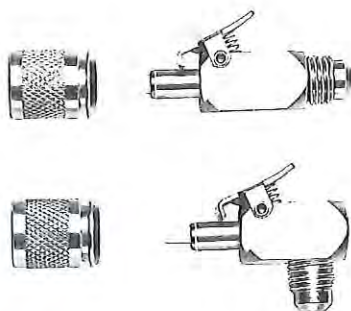
OLD		NEW	
ROBINAIR	IMPERIAL	ROBINAIR	IMPERIAL
VU1-4A	VU1-4A	40400	GU1-4A
VU1-4B	VU1-4B	40401	GU1-4B
VUS3-2	VUS3-2	40416	GUS3-2
VUS3-3	VUS3-3	40417	GUS3-3
VUS3-4	VUS3-4	40418	GUS3-4
VUS3-5	VUS3-5	40419	GUS3-5
VUS3-6	NONE	40420	GUS3-6
VUS3-34	VUS3-34	40426	GUS3-34
VUS3-46	VUS3-46	40427	GUS3-46
VUS3-58	VUS3-58	40428	GUS3-58
VUS3-68	VUS3-68	40429	GUS3-68
VUS3-346	VUS3-346	40435	GUS3-346
VT2-4	VT2-4	40382	GT2-4
VT2-5	NONE	40383	GT2-5
VT2-6	NONE	40384	GT2-6
—	NONE	—	GT2-10
—	NONE	—	GT2-456
V6300	V6300	40535	G6300

These Cross References have been compiled to the best of our ability from available Robinair and Imperial literature.

We assume no liability for its use or misuse.

WE HAVE LARGE STOCK HOLDINGS OF PARTS FOR YOUR SUPERCEDED EQUIPMENT

IMPERIAL Kwik Coupler



Connecting Illustration

INSTANT Connection

- Push to connect
- Pull to disconnect

AUTOMATIC Operation

- Seals perfectly without skilled manipulation
- Depresses all core valves without adjustment

The Kwik Coupler set is intended for use with refrigeration air conditioning service manifold high and low side hoses, when connecting to core valve type service fittings. Conventional threaded connecting is converted to push-pull operation which is faster, easier and positive sealing at all times. Valve cores are depressed automatically without adjustments or loss of refrigerant. Disconnecting is also accomplished without loss of refrigerant.

An automatic shutoff valve retains refrigerant pressure in a disconnected hose. This feature permits transferring high side hose refrigerant through the service manifold into the low side, thereby eliminating waste and hazardous high pressure discharge. Hoses can also be stored under low side pressure to prevent contamination, if desired.

Features

- Automatic full depression of core valves without adjustment, regardless of core position.
- Coupler halves separately connect to access fitting and hose end, then easy push/pull operation automatically opens or closes system without loss of refrigerant.
- Automatic shutoff of hose ends permits discharging high side hose through manifold into low side.
- Eliminates hazardous discharge of refrigerant and oil from high side of system when disconnecting hose.
- Simplifies operation of charging critical amount of refrigerant into small systems.
- Prevents freezing hand when disconnecting— especially servicing heat pumps in cold weather.
- Hoses can be stored under slight pressure, if desired, to prevent contamination.
- Core depressors in hose ends no longer necessary— speeds servicing of systems with hand valves.

CAT. NO.	PART NO.	DESCRIPTION
207109	16 - C	Straight Coupler (45° Flare) 1/4 Female x 1/4 Male
207110	17 - C	90° Elbow Coupler (45° Flare) 1/4 Female x 1/4 Male
207111	18 - C	(Set) Includes 16 - C and 17 - C.

QUICK AS A FLASH

AND VERY CAREFUL. THAT'S OUR ORDER DEPARTMENT. WHETHER YOUR ORDER IS LARGE OR SMALL, IT WILL RECEIVE PROMPT AND EXACTING ATTENTION. WE DESPATCH OVER 90% OF ALL ORDERS ON THE SAME DAY THEY ARE RECEIVED.

NOTES

sp 8 = 1/800

GET THE RIGHT PRODUCT

NO SENSE ACCEPTING A SUBSTITUTE PART INSTEAD OF ONE THAT YOU WANT TO BUY BUT WHICH IS NOT CARRIED IN STOCK BY MOST SUPPLY HOUSES. THE PART THAT YOU THINK "WILL DO" MAY ULTIMATELY COST YOU YOUR PROFIT ON THE JOB AS WELL AS A LOST CUSTOMER. PICK OUT THE RIGHT PART YOU WANT FROM THIS CATALOGUE AND CHANCES ARE GOOD THAT WE'LL HAVE IT. IF NOT, WE WILL GET IT FOR YOU AS QUICKLY AS POSSIBLE.

COPPER TUBING AND CLIPS

HARD DRAWN COPPER TUBE REFRIGERATION QUALITY

DEHYDRATED & SEALED
Available in 6M. lengths
Sold per Metre

CAT. NO.	SIZE : Metric		SIZE : Imperial	
	O.D. mm	Wall T mm	O.D. ins	Gauge
208106	6.4	0.91	1/4	20
208107	9.5	1.20	3/8	18
208108	9.5	0.91	3/8	20
208109	12.7	1.20	1/2	18
208110	12.7	0.91	1/2	20
208111	15.9	1.20	5/8	18
208112	15.9	0.91	5/8	20
208113	19.1	1.20	3/4	18
208114	19.1	0.91	3/4	20
208115	22.2	1.20	7/8	18
208116	22.2	0.91	7/8	20
208117	25.4	1.20	1	18
208118	25.4	0.91	1	20
208119	28.6	1.20	1-1/8	18
208120	28.6	0.91	1-1/8	20
208121	31.8	1.20	1-1/4	18
208122	31.8	0.91	1-1/4	20
208123	38.1	1.20	1-1/2	18
208124	38.1	0.91	1-1/2	20
208125	34.9	1.20	1-3/8	18
208126	34.9	0.91	1-3/8	20
208127	41.3	1.20	1-5/8	18
208128	44.5	0.91	1-3/4	20
208129	44.5	1.20	1-3/4	18
208130	47.6	0.91	1-7/8	20
208131	47.6	1.20	1-7/8	18
208132	50.8	1.60	2	16
208133	50.8	1.20	2	18
208134	50.8	0.91	2	20
208135	54.0	1.60	2-1/8	16
208136	54.0	1.20	2-1/8	18
208137	54.0	0.91	2-1/8	20
208138	57.2	1.60	2-1/4	16
208139	57.2	1.20	2-1/4	18
208140	57.2	0.91	2-1/4	20
208141	60.3	1.60	2-3/8	16
208142	60.3	1.20	2-3/8	18
208143	60.3	0.91	2-3/8	20
208144	63.5	1.60	2-1/2	16
208145	63.5	1.20	2-1/2	18
208146	63.5	0.91	2-1/2	20
208147	66.7	1.60	2-5/8	16
208148	66.7	1.20	2-5/8	18
208149	66.7	0.91	2-5/8	20
208150	76.2	1.60	3	16
208151	76.2	0.91	3	20
208152	41.3	0.91	1-5/8	20

IMPERIAL POLY-TUBE RACK



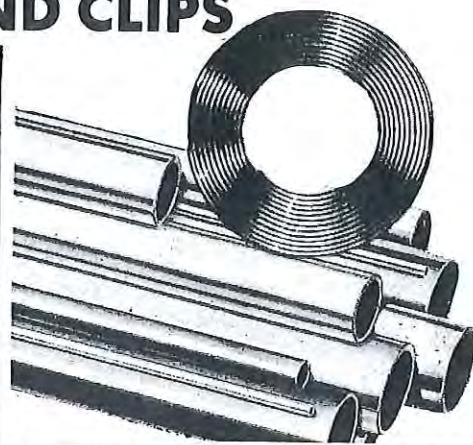
Up to 10 tubes can be held in a compact, orderly manner with these tubing racks. Furnished in black polyethylene.

CAT.No.20832 Type 14-P : Poly-Tube Rack for 1/4" O.D. tubing. Has lips for fastening rack to a base with screws. Also longitudinal grooves for channel mounting.

CAT.No.20833 Type 16-P : Poly-Tube Rack for 3/8" O.D. tubing. Lips and grooves.

CAT.No.20834 Type 26-P : Poly-Tube Rack for 1/2" O.D. tubing. Holds 6 tubes. Lips and grooves.

NOTE
As stocks are drawn both from local and overseas sources where standards differ slightly, the values as shown can only be considered as approx. Prices of copper tubing are constantly changing in accordance with the world price of raw copper. Prices of tubing therefore can only be quoted as at date of delivery.



CAPILLARY TUBING 0.77mm(22G)Wall thickness Sold per Metre

CAT. NO.	NOMINAL I.D		TOL ins-Thou
	mm	ins	
20835	0.43	.017	16/19
20836	0.66	.026	24/27
20837	0.74	.029	28/31
20838	0.79	.031	28/31
20854	0.86	.034	32/34
20839	0.91	.036	35/38
20840	0.97	.038	35/38
20841	1.02	.040	39/42
20842	1.07	.042	39/42
20857	1.12	.044	43/46
20843	1.14	.045	43/46
20844	1.17	.046	43/46
20845	1.24	.049	47/50
20846	1.27	.050	47/50
20855	1.37	.054	51/54
20847	1.40	.055	55/58
20858	1.45	.057	55/58
20848	1.50	.059	59/62
20849	1.52	.060	59/62
20859	1.63	.064	63/66
20850	1.78	.070	67/70
20851	1.91	.075	75/78
20852	2.03	.080	79/82
20856	2.29	.090	87/90

SOFT ANNEALED COPPER TUBING DEHYDRATED & SEALED Available in 18 m Coils Sold per Metre

CAT. NO.	SIZE: Metric		SIZE: Imperial	
	O.D. mm	Wall T. mm	O.D. ins.	Gauge
20893	3.2	0.71	1/8	22
20894	4.8	0.91	3/16	20
20895	7.9	0.91	5/16	20
20896	6.4	0.91	1/4	20
20897	9.5	0.91	3/8	20
20898	12.7	0.91	1/2	20
20899	15.9	0.91	5/8	20
208100	19.1	0.91	3/4	20
20889	22.2	0.91	7/8	20

STEEL TUBING FOR AMMONIA 6.4 mm O.D. x 0.9 mm Wall (1/4" O.D. x 20G)

CAT. NO. 20876

FISCHER PIPE SADDLES & WALL PLUGS

PIPE SADDLES				WALL PLUGS		
CAT. NO.	SIZE		TYPE NO.	CAT. NO.	LENGTH ins	TYPE NO.
	mm	ins				
20860	4-8	5/32-5/16	SCH48	20873	3/4	S 4
20861	8-12	5/16-1/2	SCH812	20874	1	S 5
20862	12-16	1/2-5/8	SCH1216	20875	1-3/16	S 6
20863	16-23	5/8-7/8	SCH1623	20871	1-5/8	S 8
20864	23-32	7/8-1-1/4	SCH2332	20872	2	S10
20865	32-42	1-1/4-1-5/8	SCH3242			
20866	42-54	1-5/8-2-1/8	SCH4254			

SINGLE

SIZE	CAT.NO	HELDON	HUDSON
1/4	2081	102950	4401
5/16	2082	102951	4402
3/8	2083	102952	4403
1/2	2084	102953	4404
5/8	2085	102954	4405
3/4	2086	102955	4406
7/8	2087	102956	4415
1	2088	102957	4416
1-1/8	2089	102958	4417
1-1/4	20810	102959	-
1-3/8	20811	102960	4418
1-1/2	20812	102965	-
1-5/8	20813	102967	4419
1-3/4	20814	102966	-
2	20815	102961	-
2-1/8	20816	102968	-
2-1/2	20817	102962	-
2-5/8	20818	102969	-
3	20819	102963	-
3-1/2	20820	102964	-



DOUBLE

SIZE	CAT.NO.	HELDON	HUDSON
1/4 1/4	-	-	4420
1/2 1/4	20825	102970	4407
5/8 1/4	20826	102973	4408
5/8 3/8	20827	102971	4410
3/4 3/8	20828	102972	4409

TRIPLE

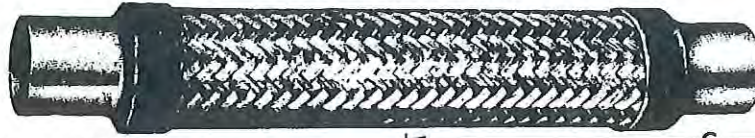
SIZE	CAT.NO.	HELDON	HUDSON
1/4 1/4 1/4	-	-	4421
1/2 1/2 1/4	20831	102980	4411

MULTI

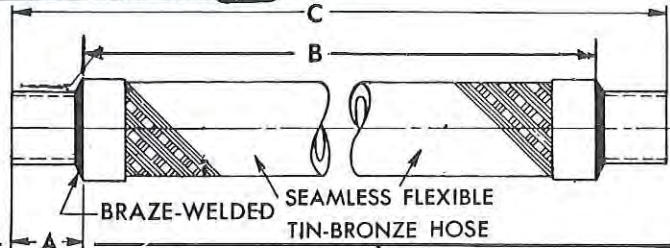
SIZE	No.Pipes	CAT.NO.	HUDSON
1/4	4	-	4422
1/4	5	-	4423
1/4	6	-	4424

VIBRATION ELIMINATORS

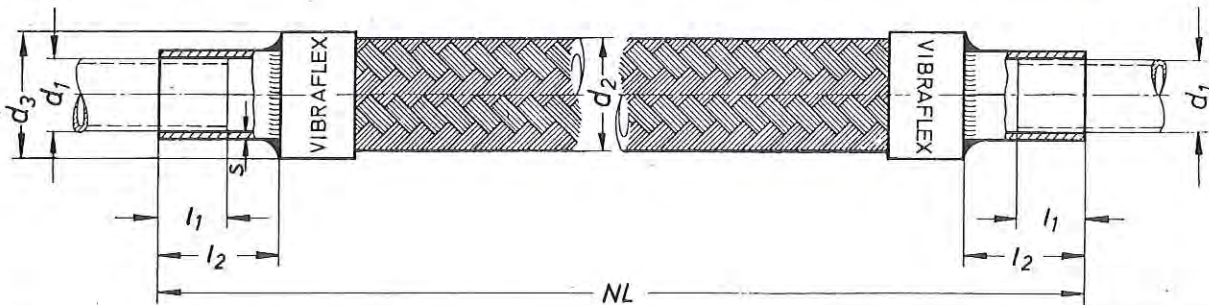
WITH FEMALE ENDS



Constructed of Seamless Flexible Bronze Hose — Bronze Wire Braid Covering — Copper Ferrules and Standard Copper Tube Ends. Tube ends are attached to the hose, braid and ferrules with high temperature brazing alloys — not affected by heat of silver soldering on installations.



TO FIT COPPER TUBING HAVING		ID FLEXIBLE HOSE	A LENGTH OF COPPER TUBE END	B LENGTH OF FLEXIBLE HOSE	C OVERALL LENGTH	PACKLESS		ANACONDA	
ACTUAL OD	NOMINAL ID					CAT. NO.	SIZE	CAT. NO.	SIZE
1/4"	1/8"	3/16"	1/2"	6"	7"	20926	VAF-1	2091	3618 FX
1/4"	1/8"	1/4"	1/2"	6 1/2"	7 1/2"	20927	VAF-2	2092	1418 FX
3/8"	1/4"	5/16"	5/8"	7"	8 1/4"	20928	VAF-3	2093	5614 FX
1/2"	3/8"	3/8"	3/4"	7 1/2"	9"	20929	VAF-4	2094	3838 FX
5/8"	1/2"	1/2"	7/8"	8"	9 3/4"	20930	VAF-5	2095	1212 FX
3/4"	5/8"	1/2"	1"	8"	10"	20931	VAF-6		1258 FX
3/4"	5/8"	3/4"	1-1/8"	9"	11 1/4"	20932	VAF-7	2097	3458 FX
7/8"	3/4"	3/4"	1 1/4"	9"	11 1/2"	20933	VAF-8	2098	3434 FX
1-1/8"	1"	1"	1 1/2"	10"	13"	20934	VAF-9	2099	1010 FX
1-3/8"	1 1/4"	1 1/4"	1-5/8"	11 1/2"	14 3/4"	20935	VAF-10	20910	5454 FX
1-5/8"	1 1/2"	1 1/2"	2"	13"	17"	20936	VAF-11	20911	6464 F
2-1/8"	2"	2"	2 1/2"	15"	20"	20937	VAF-12	20912	2020 F
2-5/8"	2 1/2"	2 1/2"	3"	18"	24"	20938	VAF-13	20916	5252 F
3-1/8"	3"	3"	3 1/2"	20"	27"	20939	VAF-14	20913	3030 F
3-5/8"	3 1/2"	3 1/2"	4"	24"	32-5/8"	20940	VAF-15	20914	7272 F
4-1/8"	4"	4"	4 1/2"	24"	33-3/8"	20941	VAF-16	20915	4040 F
5-1/8"	5"	5"	5 1/2"	30"	41"	20942	VAF-17	20917	5050 FS
6-1/8"	6"	6"	6 1/2"	36"	49"	20943	VAF-18	20918	6060 FS



NOM. DIA.	CONNECTION FOR OD OF TUBE		5	BRAZING LENGTH		l ₂	d ₂	d ₃	NOM. LENGTH ±6	HYDRA VIBRAFLEX	
	ins	mm		ins	mm					CAT. NO.	SIZE
6	1/4	6,4	1	5/16	8	14	11,7	14	180	20951	2613-12-6
8	3/8	9,5	1	5/16	8	16	14,3	17	200	20952	2613-12-8
10	1/2	12,7	1	3/8	10	20	16,7	20	220	20953	2613-12-10
12	5/8	15,9	1	1/2	13	22	19,3	22	250	20954	2613-12-12
16	3/4	19,1	1	5/8	16	25	23,8	26	250	20955	2613-12-16
20	7/8	22,2	1	3/4	19	32	28,7	32	280	20956	2613-12-20
25	1-1/8"	28,6	1,5	29/32	23	36	35,2	38	320	20957	2613-12-25
32	1-3/8	34,9	1,5	31/32	25	40	44,0	48	360	20958	2613-12-32
40	1-5/8	41,3	1,5	1-3/32	28	50	62,3	66	450	20959	2613-12-40
50	2-1/8	54,0	2	1-11/32	34	63	75,0	80	500	20960	2613-12-50

REFER TO TECH. PAGE 209-a FOR APPLICATION AND FITTING DATA.