

NOZZLES-HALOCARBONS NOMINAL TONS AT 95°F CONDENSING, 20°F EVAPORATOR

NOZZLE NO.	56	54	52	50	48	44	40	36	31	29	23	16	7	1
SIZE (IN.)	.047	.055	.064	.070	.076	.086	.098	.107	.120	.136	.154	.177	.201	.228
R22	1.2	1.6	2.2	2.7	3.1	4.0	5.2	6.1	7.8	9.9	12.8	17.0	21.8	28.0
R502	.82	1.1	1.5	1.9	2.2	2.8	3.7	4.3	5.5	7.1	9.0	11.9	15.4	19.8
INJECTOR AVAILABILITY	2020-SL (BRASS) : 2075 WCB (STEEL)										////////////////////////////////////			
	2100 WCB & 2100 WCBA (STEEL)												////////////////////////////////////	
	////////////////////////////////////						2100 SL (BRASS)							

Note: R12 ratings are approximately 0.57 times R22 ratings.

MULTIPLIERS FOR HALOCARBON NOZZLE CAPACITY

SUCTION TEMP (°F)	CONDENSING TEMPERATURE(°F)											
	70		80		90		95		100		110	
	R22	R502	R22	R502	R22	R502	R22	R502	R22	R502	R22	R502
40	.89	.86	.94	.95	1.00	1.01	1.03	1.03	1.05	1.02	1.09	1.04
20	.87	.85	.93	.92	.97	.99	1.00	1.00	1.02	.99	1.04	1.01
5	.85	.84	.90	.90	.94	.95	.96	.97	.97	.95	1.01	.97
-10	.82	.83	.87	.87	.91	.89	.93	.93	.95	.89	.97	.94
-40	.77	.80	.81	.83	.84	.84	.86	.85	-	-	-	-

MULTI-OUTLET DISTRIBUTOR AVAILABILITY

O.D.C. TUBING	NUMBER OF OUTLETS	
	2020-SLD	2100-SLD
3/16"	5-10	-
1/4"	3-5	-
5/16"	3	-
3/8"	-	4-7
1/2"	-	4-11

SINGLE OUTLET MIXING TUBE (THROAT)-NOMINAL TONS

THROAT	3/16"		1/4"		5/16"		3/8"		1/2"		5/8"		3/4"			
	R22	R502	R22	R502	R22	R502	R22	R502	R22	R502	R22	R502	R22	R502		
SUCTION TEMPERATURE (°F)	40	2.0	1.8	3.6	3.1	5.7	4.8	8.2	7.0	14.5	12.4	22.6	19.4	32.5	27.8	
	30	1.8	1.5	3.1	2.6	4.9	4.1	7.1	5.9	12.6	10.4	19.7	16.4	28.3	23.4	
	20	1.5	1.3	2.6	2.2	4.1	3.5	5.9	5.0	10.5	8.9	16.4	13.8	23.7	19.9	
	10	1.2	1.1	2.2	1.8	2.4	2.9	4.9	4.1	8.8	7.3	13.7	11.4	19.6	16.4	
	0	1.1	.91	1.9	1.6	3.0	2.4	4.3	3.5	7.7	6.2	12.0	9.7	17.3	13.9	
	-10	.89	.75	1.6	1.3	2.5	2.0	3.6	2.9	6.4	5.1	9.9	8.0	14.2	11.5	
	-20	.76	.62	1.3	1.1	2.1	1.7	3.0	2.4	5.4	4.3	8.4	6.7	12.1	9.5	
	-30	.59	.51	1.0	.87	1.6	1.4	2.3	2.0	4.2	3.5	6.5	5.4	9.4	7.8	
	-40	.46	.40	.81	.69	1.3	1.1	1.8	1.5	3.2	2.7	5.1	4.3	7.4	6.2	
INJECTOR AVAILABILITY	2020-SL, 2075WCB										////////////////////////////////////					
	////////////////////////////////////												2100WCB, 2100WCBA			
	////////////////////////////////////												2100-SL			

Note: R12 ratings are approximately 0.534 times R22 ratings.

DISTRIBUTOR TUBE CAPACITY-NOMINAL TONS (O.D. TUBE)

THROAT	3/16"		1/4"		5/16"		3/8"		1/2"		
	R22	R502	R22	R502	R22	R502	R22	R502	R22	R502	
SUCTION TEMPERATURE (°F)	40	.47	.4	1.00	.86	1.8	1.5	2.8	2.4	5.5	4.7
	30	.41	.34	.87	.72	1.5	1.3	2.4	1.9	4.8	4.0
	20	.34	.29	.73	.61	1.3	1.1	2.0	1.6	4.0	3.4
	10	.29	.24	.60	.50	1.1	.9	1.7	1.3	3.5	2.8
	0	.25	.20	.53	.43	.94	.76	1.5	1.1	3.0	2.3
	-10	.21	.17	.44	.35	.78	.63	1.2	.93	2.5	1.9
	-20	.18	.14	.37	.29	.67	.52	1.0	.77	2.0	1.6
	-30	.14	.11	.29	.24	.51	.43	.81	.63	1.6	1.3
	-40	.11	.09	.22	.19	.40	.34	.63	.50	1.2	1.1

O.D.C. TUBING CAPACITY FACTORS

% NOMINAL LOAD	150	125	100	75	50
MAX. TUBE LENGTH	17"	23"	36"	62"	120"

MIXING TUBE RECIRCULATING RATES

% THROAT LOAD	150	100	75	50
% RECIRCULATION	33	100	167	300

Dimensions

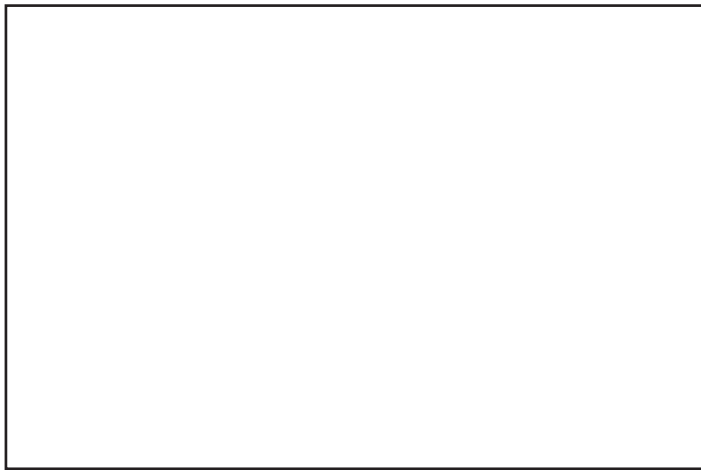


Figure 5: Dimensional Drawing of Series SL and SLD Injectors

PHILLIPS SERIES "SL" AND "SLD" INJECTOR DIMENSIONS (Inches)

INJECTOR MODEL	A	B	C (O.D.C)	D	E	F (O.D.C.)	G	H	SHIPPING WT. (LBS.)
2020-SL	1.31	2.00	3/4	.69	2.15	3/8	.5	4.15	0.8
2020-SLD					*			5.78†	1.0
2100-SL	1.94	2.88	1-3/8	1.0	4.07	5/8	.75	6.94	2.4
2100-SLD					*			9.09†	3.8

*Variable—consult factory

† Maximum



Figure 6: Dimensional Drawing of Steel Recirculating Injectors

STEEL RECIRCULATING INJECTORS—DIMENSIONS (Inches)

INJECTOR MODEL	A	B	C	D	E (IPS)	F		SHIPPING WT. (LBS.)
						(IPS)	(ODC)	
2075WCB	2.13	3.63	6.38	0.99	3/4 (FPT)	3/8, 1/2	5/8	2.15
2100WCB	2.69	4.00	7.25	1.25	1 (FPT)	3/8, 1/2	5/8	3.55
2100WCBA	2.69	4.00	7.25	1.25	1 (MPT)	3/8, 1/2	5/8	3.60
2125WA	1.88	3.25	5.87	1.25	1-1/4	1/2	5/8	4.15
2150WA	2.25	3.94	7.38	1.44	1-1/2	3/4	7/8	6.50
2200WA	2.50	6.37	11.75	1.88	2	3/4	1-1/8	11.38
2250WA	3.00	6.31	12.50	2.31	2-1/2	1	1-3/8	13.20