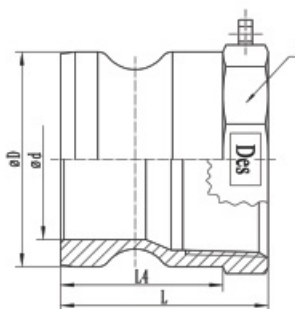




Type A

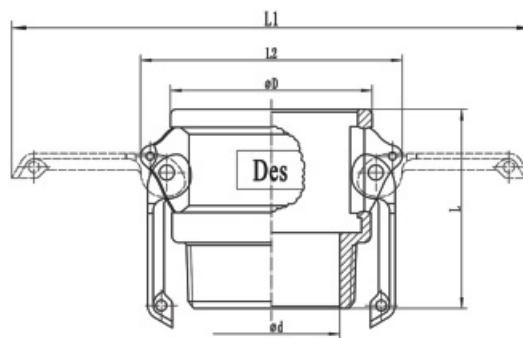


DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Inside Diameter d	Body Length L	Machine Length L4	Wrench Flats S
1/2"	KLS61A012	0.11	0.94 ± 0.005	0.57 ± 0.008	1.38-0.03	0.98 ± 0.005	1.00 ± 0.015
3/4"	KLS61A034	0.17	1.26 ± 0.005	0.88 ± 0.008	1.38-0.03	0.98 ± 0.005	1.26 ± 0.015
1"	KLS61A010	0.25	1.44 ± 0.005	0.98 ± 0.008	1.71-0.04	1.25 ± 0.005	1.48 ± 0.015
1 1/4"	KLS61A114	0.38	1.79 ± 0.006	1.20 ± 0.010	1.99-0.04	1.51 ± 0.006	1.81 ± 0.015
1 1/2"	KLS61A112	0.51	2.10 ± 0.006	1.45 ± 0.010	2.03-0.04	1.52 ± 0.006	2.09 ± 0.015
2"	KLS61A200	0.70	2.48 ± 0.006	1.89 ± 0.012	2.42-0.04	1.87 ± 0.006	2.56 ± 0.020
2 1/2"	KLS61A212	1.14	2.98 ± 0.006	2.28 ± 0.012	2.94-0.04	1.94 ± 0.006	3.07 ± 0.020
3"	KLS61A300	1.25	3.60 ± 0.008	2.95 ± 0.012	2.66-0.05	2.01 ± 0.008	3.70 ± 0.020
4"	KLS61A400	2.04	4.71 ± 0.010	4.01 ± 0.016	2.70-0.05	1.94 ± 0.008	4.73 ± 0.030
5"	KLS61A500	4.07	5.73 ± 0.015	4.96 ± 0.020	3.19-0.06	2.19 ± 0.011	5.91 ± 0.030
6"	KLS61A600	5.83	6.93 ± 0.015	5.90 ± 0.020	3.35-0.06	2.32 ± 0.011	7.09 ± 0.035

Type B

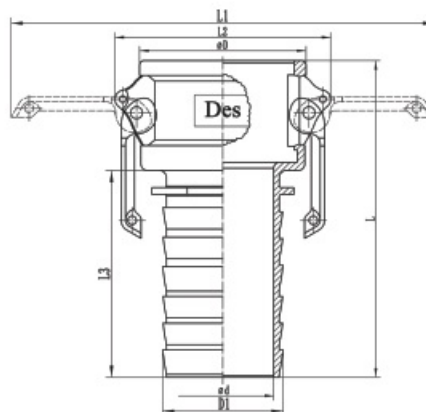


DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Inside Diameter d	Body Length L	Handle Length L1	Body Edge L2
1/2"	KLS61B012	0.33	1.30 ± 0.015	1.00 ± 0.010	1.73-0.03	4.33 ± 0.040	2.15-0.03
3/4"	KLS61B034	0.36	1.60 ± 0.015	1.28 ± 0.010	1.77-0.03	4.73 ± 0.040	2.50-0.03
1"	KLS61B010	0.48	1.81 ± 0.015	1.48 ± 0.010	2.13-0.04	5.24 ± 0.040	2.68-0.04
1 1/4"	KLS61B114	0.82	2.23 ± 0.020	1.82 ± 0.015	2.50-0.04	7.13 ± 0.060	3.11-0.04
1 1/2"	KLS61B112	0.92	2.52 ± 0.020	2.13 ± 0.015	2.56-0.04	7.42 ± 0.060	3.46-0.04
2"	KLS61B200	1.14	2.92 ± 0.025	2.51 ± 0.015	2.81-0.04	7.80 ± 0.060	3.82-0.04
2 1/2"	KLS61B212	1.45	3.43 ± 0.025	3.02 ± 0.020	3.23-0.04	8.29 ± 0.060	4.29-0.04
3"	KLS61B300	2.11	4.15 ± 0.030	3.64 ± 0.030	3.32-0.05	9.76 ± 0.080	5.10-0.05
4"	KLS61B400	2.77	5.28 ± 0.030	4.74 ± 0.030	3.47-0.05	10.87 ± 0.100	6.38-0.05
5"	KLS61B500	5.83	6.42 ± 0.040	5.76 ± 0.040	3.98-0.06	11.89 ± 0.100	7.28-0.06
6"	KLS61B600	7.37	7.78 ± 0.060	6.96 ± 0.060	4.33-0.06	14.88 ± 0.100	8.82-0.06

Type C More Stpes

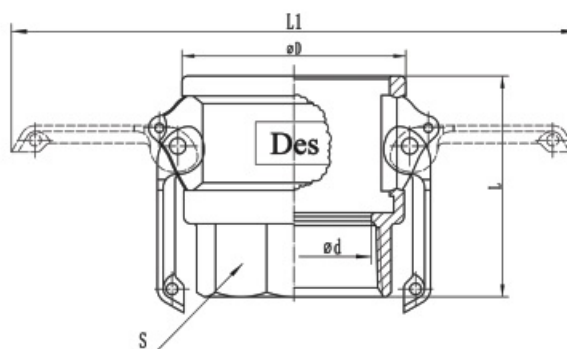


DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Inside Diameter d	Hose Diameter D1	Body Length L	Handle Length L1	Body Edge L2	Hose Length L3
1/2"	KLS61C012	0.33	1.30 ± 0.015	0.33 ± 0.010	0.55 ± 0.010	2.76-0.03	4.33 ± 0.04	2.15-0.03	1.61 ± 0.010
3/4"	KLS61C034	0.36	1.60 ± 0.015	0.57 ± 0.010	0.81 ± 0.010	3.19-0.03	4.72 ± 0.04	2.50-0.03	2.01 ± 0.010
1"	KLS61C010	0.48	1.81 ± 0.015	0.83 ± 0.010	1.06 ± 0.010	3.62-0.04	5.24 ± 0.04	2.68-0.04	2.20 ± 0.010
1 1/4"	KLS61C114	0.82	2.23 ± 0.020	1.04 ± 0.015	1.30 ± 0.010	4.09-0.04	7.13 ± 0.06	3.11-0.04	2.38 ± 0.015
1 1/2"	KLS61C112	0.92	2.52 ± 0.020	1.32 ± 0.015	1.57 ± 0.010	4.33-0.04	7.42 ± 0.06	3.46-0.04	2.60 ± 0.015
2"	KLS61C200	1.14	2.92 ± 0.025	1.77 ± 0.015	2.07 ± 0.012	5.00-0.04	7.80 ± 0.06	3.82-0.04	3.10 ± 0.015
2 1/2"	KLS61C212	1.45	3.43 ± 0.025	2.26 ± 0.020	2.60 ± 0.012	5.35-0.04	8.29 ± 0.06	4.29-0.04	3.28 ± 0.020
3"	KLS61C300	2.11	4.15 ± 0.030	2.76 ± 0.030	3.11 ± 0.015	5.91-0.05	9.76 ± 0.08	5.10-0.05	3.81 ± 0.030
4"	KLS61C400	2.77	5.28 ± 0.030	3.62 ± 0.030	4.06 ± 0.016	6.57-0.05	10.87 ± 0.10	6.38-0.05	4.48 ± 0.030
5"	KLS61C500	5.83	6.42 ± 0.040	4.72 ± 0.040	5.14 ± 0.020	7.48-0.06	11.89 ± 0.10	7.28-0.06	5.16 ± 0.040
6"	KLS61C600	7.37	7.78 ± 0.060	5.59 ± 0.060	6.14 ± 0.025	7.87-0.06	14.88 ± 0.10	8.82-0.06	5.41 ± 0.050

Type D



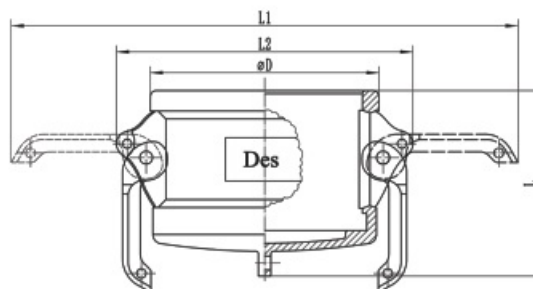
DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Inside Diameter d	Body Length L	Handle Length L1	Wrench Flats S
1/2"	KLS61D012	0.34	1.30 ± 0.015	0.47 ± 0.010	1.69-0.03	4.33 ± 0.04	1.00 ± 0.015
3/4"	KLS61D034	0.41	1.60 ± 0.015	0.67 ± 0.010	1.77-0.03	4.73 ± 0.04	1.22 ± 0.015
1"	KLS61D010	0.51	1.81 ± 0.015	0.98 ± 0.010	2.11-0.04	5.24 ± 0.04	1.46 ± 0.015
1 1/4"	KLS61D114	0.88	2.23 ± 0.020	1.26 ± 0.015	2.50-0.04	7.13 ± 0.06	1.81 ± 0.015
1 1/2"	KLS61D112	0.96	2.52 ± 0.020	1.52 ± 0.015	2.56-0.04	7.42 ± 0.06	2.05 ± 0.015
2"	KLS61D200	1.18	2.92 ± 0.025	1.97 ± 0.015	2.85-0.04	7.80 ± 0.06	2.52 ± 0.020
2 1/2"	KLS61D212	1.62	3.43 ± 0.025	2.44 ± 0.020	3.23-0.04	8.29 ± 0.06	3.15 ± 0.020
3"	KLS61D300	2.19	4.15 ± 0.030	2.91 ± 0.030	3.31-0.05	9.76 ± 0.08	3.74 ± 0.020
4"	KLS61D400	3.04	5.28 ± 0.030	4.02 ± 0.030	3.46-0.05	10.87 ± 0.10	4.72 ± 0.030
5"	KLS61D500	5.43	6.42 ± 0.040	4.84 ± 0.040	3.98-0.06	11.89 ± 0.10	5.94 ± 0.030
6"	KLS61D600	7.11	7.78 ± 0.060	5.89 ± 0.060	4.33-0.06	14.88 ± 0.10	6.97 ± 0.035



Type DC

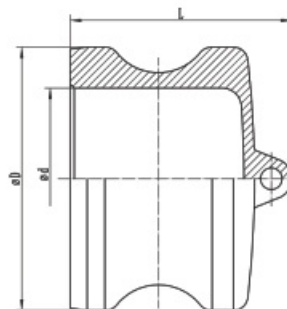


DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Body Length L	Handle Length L1	Body Edge L2
1/2"	KLS61DC012	0.29	1.30 ± 0.015	1.30-0.03	4.33 ± 0.04	2.15-0.03
3/4"	KLS61DC034	0.33	1.60 ± 0.015	1.38-0.03	4.72 ± 0.04	2.50-0.03
1"	KLS61DC010	0.42	1.81 ± 0.015	1.61-0.04	5.24 ± 0.04	2.68-0.04
1 1/4"	KLS61DC114	0.74	2.23 ± 0.020	1.91-0.04	7.13 ± 0.06	3.11-0.04
1 1/2"	KLS61DC112	0.77	2.52 ± 0.020	1.93-0.04	7.42 ± 0.06	3.46-0.04
2"	KLS61DC200	1.06	2.92 ± 0.025	2.20-0.04	7.80 ± 0.06	3.82-0.04
2 1/2"	KLS61DC212	1.30	3.43 ± 0.025	2.28-0.04	8.29 ± 0.06	4.29-0.04
3"	KLS61DC300	1.76	4.15 ± 0.030	2.36-0.05	9.76 ± 0.08	5.10-0.05
4"	KLS61DC400	2.68	5.28 ± 0.030	2.60-0.05	10.87 ± 0.10	6.38-0.05
5"	KLS61DC500	4.47	6.42 ± 0.040	2.68-0.06	11.89 ± 0.10	7.28-0.06
6"	KLS61DC600	6.45	7.78 ± 0.060	2.95-0.06	14.88 ± 0.10	8.82-0.06

Type DP



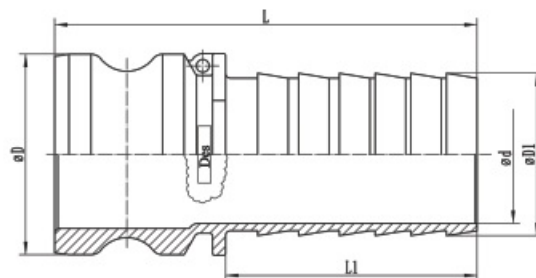
DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Inside Diameter d	Body Length L
1/2"	KLS61DP012	0.09	0.94 ± 0.005	0.57 ± 0.008	1.17-0.03
3/4"	KLS61DP034	0.13	1.26 ± 0.005	0.89 ± 0.008	1.10-0.03
1"	KLS61DP010	0.18	1.44 ± 0.005	0.98 ± 0.008	1.42-0.04
1 1/4"	KLS61DP114	0.31	1.79 ± 0.006	1.20 ± 0.010	1.58-0.04
1 1/2"	KLS61DP112	0.38	2.10 ± 0.006	1.46 ± 0.010	1.62-0.04
2"	KLS61DP200	0.58	2.48 ± 0.006	1.89 ± 0.012	1.86-0.04
2 1/2"	KLS61DP212	0.92	2.98 ± 0.006	2.28 ± 0.012	1.99-0.04
3"	KLS61DP300	1.13	3.60 ± 0.008	2.95 ± 0.012	2.11-0.05
4"	KLS61DP400	1.97	4.71 ± 0.010	4.02 ± 0.016	2.15-0.05
5"	KLS61DP500	3.45	5.73 ± 0.015	4.98 ± 0.020	2.56-0.06
6"	KLS61DP600	6.45	6.93 ± 0.015	5.91 ± 0.020	2.60-0.06



Type E More Steps

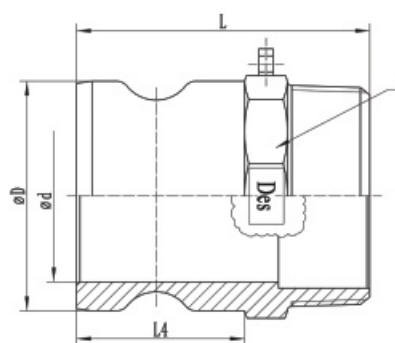


DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Inside Diameter d	Body Length L	Hose Length L1	Hose Diameter D1
1/2"	KLS61E012	0.16	0.94 ± 0.005	0.33 ± 0.010	2.87-0.03	1.57 ± 0.010	0.55 ± 0.010
3/4"	KLS61E034	0.26	1.26 ± 0.005	0.57 ± 0.010	3.39-0.03	1.97 ± 0.010	0.81 ± 0.010
1"	KLS61E010	0.40	1.44 ± 0.005	0.83 ± 0.010	3.74-0.04	2.20 ± 0.010	1.06 ± 0.010
1 1/4"	KLS61E114	0.59	1.79 ± 0.006	1.04 ± 0.015	4.29-0.04	2.36 ± 0.015	1.30 ± 0.010
1 1/2"	KLS61E112	0.79	2.10 ± 0.006	1.32 ± 0.015	4.53-0.04	2.56 ± 0.015	1.57 ± 0.010
2"	KLS61E200	1.14	2.48 ± 0.006	1.77 ± 0.015	5.20-0.04	3.07 ± 0.015	2.07 ± 0.012
2 1/2"	KLS61E212	1.75	2.98 ± 0.006	2.26 ± 0.020	5.59-0.04	3.19 ± 0.020	2.60 ± 0.012
3"	KLS61E300	2.35	3.60 ± 0.008	2.76 ± 0.030	6.14-0.05	3.82 ± 0.030	3.11 ± 0.015
4"	KLS61E400	4.09	4.71 ± 0.010	3.62 ± 0.030	6.97-0.05	4.49 ± 0.030	4.06 ± 0.016
5"	KLS61E500	5.46	5.73 ± 0.015	4.72 ± 0.040	7.13-0.06	4.61 ± 0.040	5.14 ± 0.020
6"	KLS61E600	8.10	6.93 ± 0.015	5.59 ± 0.060	7.80-0.06	4.92 ± 0.050	6.14 ± 0.025

Type F



DIMENSIONS

Unit: Inch

Nom. Size	Item Number 316	Weight (lbs)	Outside Diameter D	Inside Diameter d	Body Length L	Machine Length L4	Wrench Flats S
1/2"	KLS61F012	0.17	0.94 ± 0.005	0.57 ± 0.008	1.93-0.03	0.98 ± 0.005	0.94 ± 0.015
3/4"	KLS61F034	0.21	1.26 ± 0.005	0.89 ± 0.008	1.97-0.03	0.98 ± 0.005	1.26 ± 0.015
1"	KLS61F010	0.29	1.44 ± 0.005	0.98 ± 0.008	2.36-0.04	1.25 ± 0.005	1.46 ± 0.015
1 1/4"	KLS61F114	0.48	1.79 ± 0.006	1.20 ± 0.010	2.76-0.04	1.51 ± 0.006	1.81 ± 0.015
1 1/2"	KLS61F112	0.65	2.10 ± 0.006	1.46 ± 0.010	2.83-0.04	1.52 ± 0.006	2.13 ± 0.015
2"	KLS61F200	0.87	2.48 ± 0.006	1.89 ± 0.012	3.21-0.04	1.87 ± 0.006	2.52 ± 0.020
2 1/2"	KLS61F212	1.63	2.98 ± 0.006	2.28 ± 0.012	3.50-0.04	1.94 ± 0.006	3.03 ± 0.020
3"	KLS61F300	1.78	3.60 ± 0.008	2.95 ± 0.012	3.65-0.05	2.01 ± 0.008	3.70 ± 0.020
4"	KLS61F400	2.94	4.71 ± 0.010	4.02 ± 0.016	3.87-0.05	1.94 ± 0.008	4.72 ± 0.030
5"	KLS61F500	4.73	5.73 ± 0.015	4.98 ± 0.020	4.72-0.06	2.19 ± 0.011	5.87 ± 0.030
6"	KLS61F600	6.05	6.93 ± 0.015	5.91 ± 0.020	4.92-0.06	2.32 ± 0.011	7.01 ± 0.035