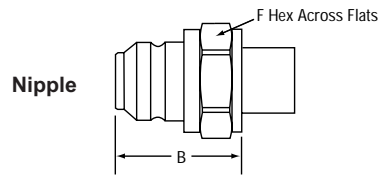
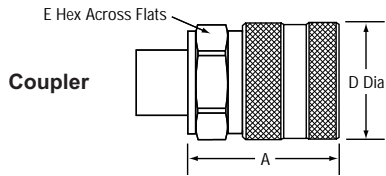


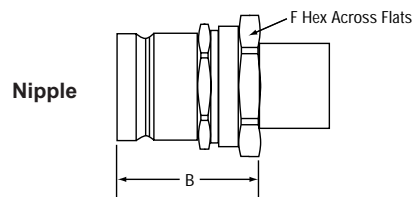
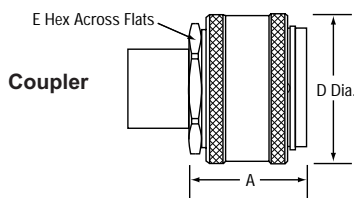
Dimensions and Weights

28-1 Series



Size	Coupler								Connected Length		Nipple					
	A		D		E		Weight		in	mm	B		F		Weight	
	in	mm	in	mm	in	mm	lb	g			in	mm	in	mm	lb	g
1/4"	1.25	31.75	.88	22.35	.75	19.05	.05	22.68	1.80	45.72	1.10	27.94	.75	19.05	.02	4.54
3/8"	1.44	36.58	1.12	28.45	1.00	25.40	.11	49.90	2.02	51.31	1.20	30.48	1.00	25.40	.05	9.07
1/2"	1.61	40.89	1.34	34.04	1.13	28.70	.17	77.11	2.15	54.61	1.25	31.75	1.13	28.70	.06	27.22
5/8"	1.70	43.18	1.58	40.13	1.38	35.05	.23	104.33	2.45	62.23	1.50	38.10	1.38	35.05	.14	63.50
3/4"	2.05	52.07	1.80	45.72	1.50	38.10	.36	163.29	2.89	73.41	1.71	43.43	1.50	38.10	.15	68.04
1"	2.70	68.58	2.32	58.93	2.00	50.80	.74	335.66	3.72	94.49	2.19	55.63	2.00	50.80	.29	131.54
1-1/4"	2.56	65.02	2.63	66.80	2.25	57.15	.76	344.73	3.51	89.15	2.16	54.86	2.25	57.15	.30	136.08
1-1/2"	3.03	76.96	2.96	75.18	2.63†	66.80†	1.33	603.28	3.75	95.25	2.16	54.86	2.63†	66.80†	.33	149.69
2"	3.55	90.17	3.92	99.57	3.25†	82.55†	1.97	893.58	4.73	120.14	2.84	72.14	3.25†	82.55†	.36	163.29

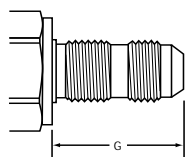
29 Series



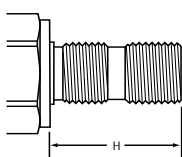
Size	Coupler								Connected Length		Nipple					
	A		D		E		Weight		in	mm	B		F		Weight	
	in	mm	in	mm	in	mm	lb	g			in	mm	in	mm	lb	g
1/8"	1.20	30.48	.88	22.35	.75	19.05	.05	22.68	1.71	43.43	1.07	27.18	.69	17.53	.03	13.61
1/4"	1.31	33.27	1.38	35.05	1.13	28.70	.13	58.97	2.01	51.05	1.30	33.02	1.13	28.70	.07	31.75
3/8"	1.57	39.88	1.63	41.40	1.25	31.75	.20	90.72	2.36	59.94	1.48	37.59	1.38	35.05	.10	45.36
1/2"	1.53	38.86	1.94	49.28	1.50	38.10	.42	190.51	2.64	67.06	1.76	44.70	1.63	41.40	.23	104.33
1/2" x 5/8"	1.53	38.86	1.94	49.28	1.50	38.10	.42	190.51	2.64	67.06	1.76	44.70	1.63	41.40	.23	104.33
3/4"	1.89	48.01	2.35	59.69	1.88	47.75	.49	222.26	2.81	71.37	2.09	53.09	1.88	47.75	.31	140.61
1"	2.45	62.23	2.44	61.98	2.13	54.10	.70	317.51	3.60	91.44	2.50	63.50	2.13	54.10	.36	163.29
1-1/4"	2.52	64.01	2.88	73.15	2.69†	68.33†	.86	390.09	3.64	92.46	2.90	73.66	2.75†	69.85†	.71	322.05

† Two wrench flats

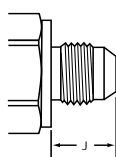
Common End Fitting Configurations, Dimensions and Weights



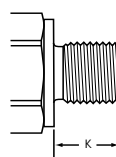
57 MS33657 Bulkhead Flared
EB SAE Bulkhead



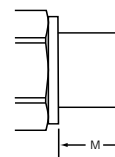
15 MS33515 Bulkhead
Flareless



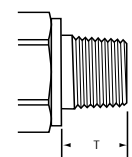
56 MS33656 Male Flared
EM Male SAE



14 MS33514 Male
Flareless



F Female NPT
RP Female British Parallel BS 2779
49 Female O-ring Boss MS33649



M Male NPT

Size	G		Wt. ¹		H		Wt. ¹		J		Wt. ¹		K		Wt. ¹		M		(Max) Wt. ¹		T		Wt. ¹	
	in	mm	lb	g	in	mm	lb	g	in	mm	lb	g	in	mm	lb	g	in	mm	lb	g	in	mm	lb	g
1/8"	.95	24.13	.01	4.53	.86	21.84	.01	4.53	.45	11.43	.01	4.53	.38	9.65	.01	4.53	.56	14.22	.01	4.53	.38	9.65	.01	4.53
1/4"	1.05	26.67	.01	4.53	.97	24.64	.01	4.53	.55	13.97	.01	4.53	.45	11.43	.01	4.53	.78	19.81	.02	9.07	.56	14.22	.01	4.53
3/8"	1.13	28.70	.01	4.53	1.02	25.91	.01	4.53	.56	14.22	.01	4.53	.47	11.94	.01	4.53	.88	22.35	.04	18.14	.56	14.22	.01	4.53
1/2"	1.28	32.51	.03	13.61	1.16	29.46	.02	9.07	.66	16.76	.01	4.53	.56	14.22	.01	4.53	1.05	26.67	.08	36.29	.75	19.05	.03	13.61
5/8"	1.42	36.07	.04	18.14	1.30	33.02	.03	13.61	.76	19.30	.02	9.07	.63	16.00	.02	9.07	1.05	26.67	.11	49.90	—	—	.03	13.61
3/4"	1.59	40.39	.06	27.22	1.41	35.81	.05	22.68	.86	21.84	.03	13.61	.69	17.53	.03	13.61	1.40	35.56	.13	58.97	.75	19.05	.03	13.61
1"	1.59	40.39	.09	40.82	1.41	35.81	.07	31.75	.91	23.11	.05	22.68	.69	17.53	.03	13.61	1.22	30.99	.19	86.18	.94	23.88	.06	27.22
1-1/4"	1.64	41.66	.14	63.50	1.41	35.81	.12	54.43	.96	24.38	.08	36.29	.69	17.53	.06	27.22	1.63	41.40	.29	131.54	.97	24.64	.09	40.82
1-1/2"	1.66	42.16	.17	77.11	1.11	28.19	.13	58.97	1.08	27.43	.11	49.90	.69	17.53	.07	31.75	1.65	41.91	.40	181.44	1.00	25.40	.11	49.90
2"	1.94	49.28	.21	95.25	1.61	40.89	.19	86.18	1.33	33.78	.15	68.04	.69	17.53	.10	45.36	1.90	48.26	.56	254.01	1.03	26.16	.16	72.57

¹Weights are for aluminum. For Stainless Steel multiply aluminum weight by 2.7. All dimensions and weights are for reference only and are subject to change without notice. Dimension tolerances: A, B, D, E & F ± .03 in. (.76 mm); Connected length ± .06 in. (± 1.52 mm)