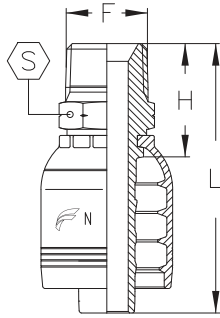


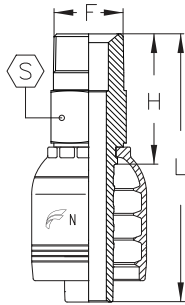




MP NPT Male



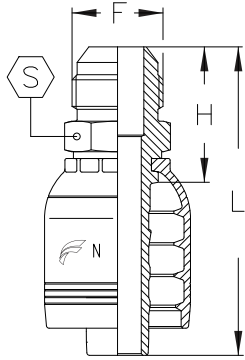
Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N06-06MP	3/8	3/8 - 18	28.6	1.12	59.1	2.33	19.0	3/4
N06-08MP	3/8	1/2 - 14	34.0	1.34	64.5	2.54	22.0	7/8
N08-06MP	1/2	3/8 - 18	30.6	1.20	63.6	2.50	22.0	7/8
N08-08MP	1/2	1/2 - 14	35.0	1.38	68.0	2.68	22.0	7/8
N08-12MP	1/2	3/4 - 14	36.9	1.45	69.9	2.75	27.0	1 1/16
N10-08MP	5/8	1/2 - 14	36.2	1.42	72.0	2.83	25.0	1
N10-12MP	5/8	3/4 - 14	37.1	1.46	72.9	2.87	27.0	1 1/16
N12-08MP	3/4	3/4 - 14	32.5	1.48	78.0	3.07	27.0	1 1/16
N12-12MP	3/4	3/4 - 14	39.0	1.53	90.0	3.54	27.0	1 1/16
N12-16MP	3/4	1 - 11 1/2	47.0	1.85	98.0	3.86	36.0	1 7/16
N16-12MP	1	3/4 - 14	41.5	1.63	98.0	3.86	32.0	1 1/4
N16-16MP	1	1 - 11 1/2	48.5	1.91	105.0	4.13	36.0	1 7/16
N16-20MP	1	1 1/4 - 11 1/2	53.0	2.09	109.5	4.31	46.0	1 13/16
N20-20MP	1 1/4	1 1/4 - 11 1/2	55.0	2.16	121.5	4.78	46.0	1 13/16
N24-24MP	1 1/2	1 1/2 - 11 1/2	61.0	2.40	143.5	5.65	50.0	2
N32-32MP	2	2 - 11 1/2	70.5	2.77	167.0	6.57	65.0	2 9/16

MPA API Male



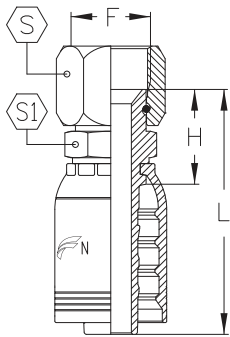
Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N32-32MPA	2	2 - 11 1/2	112.3	4.42	208.8	8.22	65.0	2 9/16




MJ JIC 37° Male



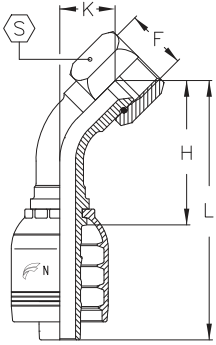
Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N06-06MJ	3/8	9/16 - 18	26.6	1.04	57.1	2.24	15	5/8
N06-08MJ	3/8	3/4 - 16	29.7	1.16	60.2	2.37	19	3/4
N08-08MJ	1/2	3/4 - 16	30.7	1.20	63.7	2.50	19	3/4
N08-10MJ	1/2	7/8 - 14	35.3	1.38	68.3	2.68	24	1
N08-12MJ	1/2	1 1/16 - 12	38.9	1.53	71.9	2.83	27	1 1/16
N10-10MJ	5/8	7/8 - 14	35.5	1.39	71.3	2.80	24	1
N10-12MJ	5/8	1 1/16 - 12	39.1	1.53	74.9	2.94	27	1 1/16
N12-12MJ	3/4	1 1/16 - 12	40.0	1.57	91.0	3.58	27	1 1/16
N12-14MJ	3/4	1 3/16 - 12	41.5	1.63	92.5	3.64	32	1 1/4
N12-16MJ	3/4	1 5/16 - 12	43.0	1.69	94.0	3.70	36	1 7/16
N16-16MJ	1	1 5/16 - 12	45.0	1.77	101.5	3.99	36	1 7/16
N16-20MJ	1	1 5/8 - 12	48.0	1.88	104.5	4.11	46	1 13/16
N20-20MJ	1 1/4	1 5/8 - 12	50.5	1.98	117.0	4.60	46	1 13/16
N24-24MJ	1 1/2	1 7/8 - 12	57.0	2.24	139.5	5.49	50	2
N32-32MJ	2	2 1/2 - 12	68.5	2.69	165.0	6.49	65	2 9/16



FJ JIC 37° Female Swivel



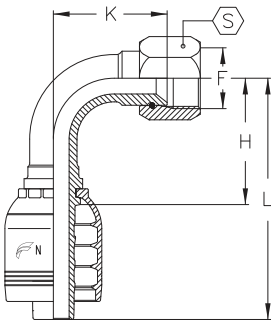
Part Number		F	H		L					
	in		mm	in	mm	in	mm	in	mm	in
N06-06FJ	3/8	9/16 - 18	22.5	0.88	53.0	2.09	19	3/4	16	5/8
N06-06FJ-01	3/8	9/16 - 18	22.5	0.88	53.0	2.09	17.5	1 1/16	16	5/8
N06-08FJ	3/8	3/4 - 16	24.5	0.96	55.0	2.16	22	7/8	19	3/4
N08-06FJ	1/2	9/16 - 18	24.5	0.96	57.5	2.26	19	3/4	19	3/4
N08-08FJ	1/2	3/4 - 16	25.5	1.00	58.5	2.30	22	7/8	19	3/4
N08-10FJ	1/2	7/8 - 14	27.5	1.08	60.5	2.38	27	1 1/16	22	7/8
N08-12FJ	1/2	1 1/16 - 12	30.3	1.19	63.3	2.49	32	1 1/4	25	1
N10-08FJ	5/8	3/4 - 16	26.7	1.05	62.5	2.46	22	7/8	22	7/8
N10-10FJ	5/8	7/8 - 14	27.7	1.09	63.5	2.50	27	1 1/16	22	7/8
N10-12FJ	5/8	1 1/16 - 12	30.5	1.20	66.3	2.61	32	1 1/4	25	1
N12-10FJ	3/4	7/8 - 14	33.0	1.30	84.0	3.31	27	1 1/16	27	1 1/16
N12-12FJ	3/4	1 1/16 - 12	34.0	1.34	85.0	3.35	32	1 1/4	27	1 1/16
N12-14FJ	3/4	1 3/16 - 12	35.5	1.40	86.5	3.40	36	1 7/16	30	1 3/16
N12-16FJ	3/4	1 5/16 - 12	38.0	1.50	89.0	3.50	41	1 5/8	32	1 1/4
N16-12FJ	1	1 1/16 - 12	36.5	1.44	93.0	3.66	32	1 1/4	32	1 1/4
N16-16FJ	1	1 5/16 - 12	39.5	1.55	96.0	3.78	41	1 5/8	32	1 1/4
N16-16FJ-01	1	1 5/16 - 12	39.5	1.55	96.0	3.78	38	1 1/2	32	1 1/4
N16-20FJ	1	1 5/8 - 12	46.0	1.81	102.5	4.03	50	2	41	1 5/8
N20-16FJ	1 1/4	1 5/16 - 12	45.5	1.79	112.0	4.41	41	1 5/8	41	1 5/8
N20-20FJ	1 1/4	1 5/8 - 12	48.0	1.89	114.5	4.51	50	2	41	1 5/8
N20-24FJ	1 1/4	1 7/8 - 12	51.0	2.01	117.5	4.62	60	2 3/8	46	1 13/16
N24-24FJ	1 1/2	1 7/8 - 12	53.0	2.09	135.5	5.33	60	2 3/8	46	1 13/16
N32-32FJ	2	2 1/2 - 12	69.0	2.72	165.5	6.51	75	3	60	2 3/8



FJ45 JIC 37° Female Swivel - 45° Elbow



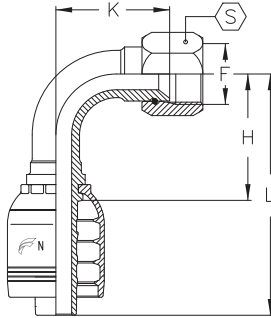
Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FJ45	3/8	9/16 - 18	35.5	1.40	66.0	2.60	12.0	0.47	19	3/4
N06-08FJ45	3/8	3/4 - 16	37.5	1.48	68.0	2.68	14.0	0.55	22	7/8
N08-08FJ45	1/2	3/4 - 16	41.0	1.61	74.0	2.91	14.5	0.57	22	7/8
N08-10FJ45	1/2	7/8 - 14	43.0	1.69	76.0	2.99	16.0	0.63	27	1 1/16
N08-12FJ45	1/2	1 1/16 - 12	45.5	1.79	78.5	3.09	19.0	0.75	32	1 1/4
N10-10FJ45	5/8	7/8 - 14	47.0	1.85	83.0	3.27	16.0	0.63	27	1 1/16
N10-12FJ45	5/8	1 1/16 - 12	50.0	1.97	86.0	3.38	19.0	0.75	32	1 1/4
N12-12FJ45	3/4	1 1/16 - 12	63.0	2.48	114.0	4.49	25.0	0.98	32	1 1/4
N12-16FJ45	3/4	1 5/16 - 12	63.0	2.48	114.0	4.49	25.0	0.98	41	1 5/8
N16-16FJ45	1	1 5/16 - 12	82.0	3.23	138.0	5.43	32.0	1.26	41	1 5/8
N16-20FJ45	1	1 5/8 - 12	82.0	3.23	138.0	5.43	32.0	1.26	50	2
N20-20FJ45	1 1/4	1 5/8 - 12	98.0	3.86	164.0	6.46	38.0	1.50	50	2
N20-24FJ45	1 1/4	1 7/8 - 12	98.0	3.86	164.0	6.46	38.0	1.50	60	2 3/8
N24-24FJ45	1 1/2	1 7/8 - 12	118.0	4.64	201.0	7.91	46.0	1.81	60	2 3/8
N32-32FJ45	2	2 1/2 - 12	157.0	6.18	253.0	9.96	62.0	2.44	75	3



FJ90S JIC 37° Female Swivel - 90° Elbow Short Drop



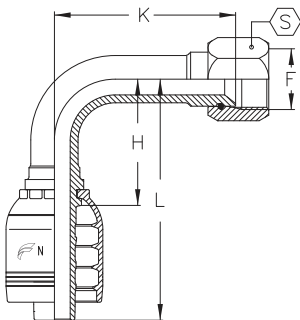
Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FJ90S	3/8	9/16 - 18	30.0	1.18	60.5	2.38	23.0	0.91	19	3/4
N06-08FJ90S	3/8	3/4 - 16	31.0	1.22	61.5	2.42	29.0	1.14	22	7/8
N08-08FJ90S	1/2	3/4 - 16	37.0	1.46	70.0	2.75	29.0	1.14	22	7/8
N08-10FJ90S	1/2	7/8 - 14	38.0	1.50	70.0	2.75	33.0	1.30	27	1 1/16
N08-12FJ90S	1/2	1 1/16 - 12	40.0	1.57	73.0	2.87	40.0	1.57	32	1 1/4



FJ90M JIC 37° Female Swivel - 90° Elbow Medium Drop



Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FJ90M	3/8	9/16 - 18	31.0	1.22	61.5	2.42	33.0	1.30	19	3/4
N06-08FJ90M	3/8	3/4 - 16	31.0	1.22	61.5	2.42	33.0	1.30	22	7/8
N08-08FJ90M	1/2	3/4 - 16	37.0	1.46	70.0	2.75	39.0	1.54	22	7/8
N08-10FJ90M	1/2	7/8 - 14	37.0	1.46	70.0	2.75	40.0	1.57	27	1 1/16
N08-12FJ90M	1/2	1 1/16 - 12	37.0	1.46	70.0	2.75	45.0	1.77	32	1 1/4
N10-10FJ90M	5/8	7/8 - 14	45.0	1.77	81.0	3.19	45.0	1.77	27	1 1/16
N10-12FJ90M	5/8	1 1/16 - 12	45.0	1.77	81.0	3.19	47.0	1.85	32	1 1/4
N12-12FJ90M	3/4	1 1/16 - 12	55.0	2.16	106.0	4.17	52.0	2.05	32	1 1/4
N12-16FJ90M	3/4	1 5/16 - 12	55.0	2.16	106.0	4.17	56.0	2.20	36	1 7/16
N16-16FJ90M	1	1 5/16 - 12	71.0	2.79	128.0	5.04	67.0	2.64	41	1 5/8
N16-20FJ90M	1	1 5/8 - 12	71.0	2.79	128.0	5.04	69.0	2.72	50	2
N20-20FJ90M	1 1/4	1 5/8 - 12	87.0	3.42	154.0	6.06	81.0	3.19	50	2
N20-24FJ90M	1 1/4	1 7/8 - 12	87.0	3.42	154.0	6.06	82.0	3.23	60	2 3/8
N24-24FJ90M	1 1/2	1 7/8 - 12	105.0	4.13	188.0	7.40	97.0	3.82	60	2 3/8
N32-32FJ90M	2	2 1/2 - 12	140.0	5.51	237.0	9.33	132.0	5.20	75	3

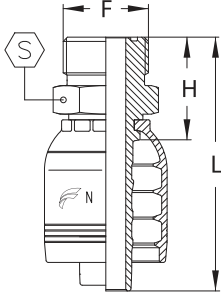
FJ90L JIC 37° Female Swivel - 90° Elbow Long Drop





Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FJ90L	3/8	9/16 - 18	31.0	1.22	61.5	2.42	54.0	2.12	19	3/4
N06-08FJ90L	3/8	3/4 - 16	31.0	1.22	61.5	2.42	64.0	2.52	22	7/8
N08-08FJ90L	3/8	1 1/16 - 12	38.0	1.50	71.0	2.79	64.0	2.52	22	7/8
N08-08FJ90L	3/8	1 1/16 - 12	38.0	1.50	71.0	2.79	64.0	2.52	22	7/8
N08-10FJ90L	1/2	7/8 - 14	38.0	1.50	71.0	2.79	70.0	2.75	27	1 1/16
N10-10FJ90L	5/8	7/8 - 14	45.0	1.77	81.0	3.19	70.0	2.75	27	1 1/16
N12-12FJ90L	3/4	1 1/16 - 12	55.0	2.16	106.0	4.17	96.0	3.78	32	1 1/4
N16-16FJ90L	1	1 5/16 - 12	71.0	2.79	128.0	5.04	116.0	4.57	41	1 5/8
N20-20FJ90L	1 1/4	1 5/8 - 12	87.0	3.42	154.0	6.06	136.0	5.35	50	2

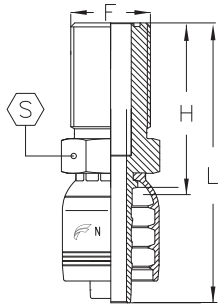
BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.



MF ORFS Male



Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N06-06MF	3/8	1 1/16 - 16	25.5	1.00	56.0	2.20	19	3/4
N06-08MF	3/8	1 3/16 - 16	28.5	1.12	59.0	2.32	22	7/8
N08-08MF	1/2	1 3/16 - 16	29.5	1.16	62.5	2.46	22	7/8
N08-10MF	1/2	1 - 14	34.0	1.33	67.0	2.63	27	1 1/16
N08-12MF	1/2	1 3/16 - 12	37.0	1.45	70.0	2.75	32	1 1/4
N10-10MF	5/8	1 - 14	34.0	1.33	70.0	2.75	27	1 1/16
N10-12MF	5/8	1 3/16 - 12	37.0	1.45	73.0	2.87	32	1 1/4
N12-12MF	3/4	1 3/16 - 12	36.0	1.42	87.0	3.42	32	1 1/4
N16-16MF	1	1 7/16 - 12	41.0	1.61	97.0	3.82	41	1 5/8
N20-20MF	1 1/4	1 11/16 - 12	44.0	1.73	111.0	4.37	46	1 13/16
N24-24MF	1 1/2	1 7/8 - 12	48.0	1.89	131.0	5.16	55	2 1/4

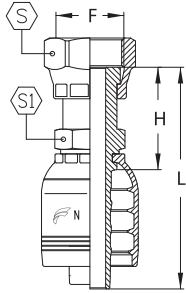
MFK ORFS Male Bulkhead






Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N06-06MFK*	3/8	1 1/16 - 16	47.0	1.85	77.0	3.03	19	3/4
N08-08MFK*	1/2	1 3/16 - 16	50.0	2.00	83.0	3.26	22	7/8

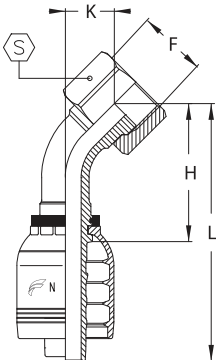
*Locknut not included.



FF ORFS Female Swivel



Part Number		F	H		L					
	in		mm	in	mm	in	mm	in	mm	in
N06-06FF	3/8	1 1/16 - 16	28.5	1.12	59.0	2.32	22	7/8	16	5/8
N06-08FF	3/8	1 3/16 - 16	32.5	1.27	63.0	2.48	24	1	19	3/4
N08-06FF	1/2	1 1/16 - 16	30.5	1.20	63.5	2.50	22	7/8	19	3/4
N08-08FF	1/2	1 3/16 - 16	33.5	1.31	66.5	2.61	24	1	19	3/4
N08-10FF	1/2	1 - 14	39.5	1.55	72.5	2.85	30	1 3/16	24	1
N08-12FF	1/2	1 3/16 - 12	43.5	1.71	76.5	3.01	36	1 7/16	27	1 1/16
N10-08FF	5/8	1 3/16 - 16	35.7	1.41	71.5	2.81	24	1	24	1
N10-10FF	5/8	1 - 14	39.5	1.55	75.5	2.97	30	1 3/16	24	1
N10-12FF	5/8	1 3/16 - 12	43.5	1.71	79.5	3.12	36	1 7/16	27	1 1/16
N12-10FF	3/4	1 - 14	43.0	1.69	94.0	3.70	30	1 3/16	27	1/16
N12-12FF	3/4	1 3/16 - 12	46.0	1.81	97.0	3.82	36	1 7/16	30	1 3/16
N12-16FF	3/4	1 7/16 - 12	49.0	1.93	100.0	3.94	41	1 5/8	36	1 7/16
N16-12FF	1	1 3/16 - 12	48.0	1.92	104.0	4.16	36	1 7/16	36	1 7/16
N16-16FF	1	1 7/16 - 12	51.0	2.01	107.0	4.21	41	1 5/8	36	1 7/16
N16-20FF	1	1 1 1/16 - 12	52.0	2.05	109.0	4.29	50	2	41	1 5/8
N20-16FF	1 1/4	1 7/16 - 12	53.0	2.09	119.5	4.70	41	1 5/8	41	1 5/8
N20-20FF	1 1/4	1 1 1/16 - 12	55.0	2.16	121.0	4.76	50	2	41	1 5/8
N24-24FF	1 1/2	2 - 12	60.0	2.36	142.0	5.59	60	2 3/8	50	2

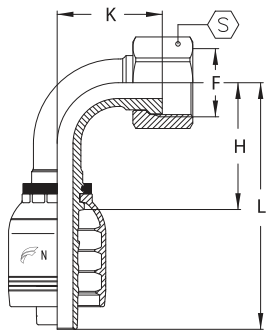
FF45 ORFS Female Swivel - 45° Elbow





Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FF45	3/8	1 1/16 - 16	36.0	1.41	66.5	2.61	12.5	0.49	22	7/8
N06-08FF45	3/8	1 3/16 - 16	38.5	1.51	69.0	2.71	15.0	0.59	24	1
N08-06FF45	1/2	1 1/16 - 16	46.5	1.83	79.5	3.12	19.5	0.76	22	7/8
N08-08FF45	1/2	1 3/16 - 16	42.5	1.67	75.5	2.97	15.5	0.61	24	1
N08-10FF45	1/2	1 - 14	45.0	1.77	78.0	3.07	17.5	0.68	30	1 3/16
N08-12FF45	1/2	1 3/16 - 12	47.0	1.85	80.0	3.14	20.5	0.80	36	1 7/16
N10-10FF45	5/8	1 - 14	49.0	1.92	85.0	3.34	18.0	0.70	30	1 3/16
N10-12FF45	5/8	1 3/16 - 12	51.5	2.02	87.5	3.44	20.5	0.80	36	1 7/16
N12-12FF45	3/4	1 3/16 - 12	60.0	2.36	111.0	4.37	22.0	0.87	36	1 7/16
N12-16FF45	1	1 7/16 - 12	61.0	2.40	112.0	4.40	23.0	0.91	41	1 5/8
N16-12FF45	1	1 3/16 - 12	63.0	2.48	120.0	4.72	22.0	0.87	36	1 7/16
N16-16FF45	1	1 7/16 - 12	78.0	3.07	134.0	5.27	29.0	1.14	41	1 5/8
N16-20FF45	1	1 1 1/16 - 12	78.0	3.07	134.0	5.27	29.0	1.14	50	2
N20-20FF45	1 1/4	1 1 1/16 - 12	93.0	3.66	159.0	6.26	34.0	1.34	50	2
N24-24FF45	1 1/2	2 - 12	113.0	4.45	195.0	7.68	41.0	1.61	60	2 1/2

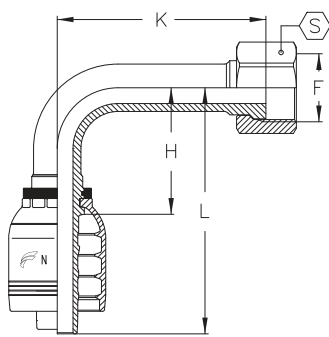
BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.



FF90S ORFS Female Swivel - 90° Elbow Short Drop



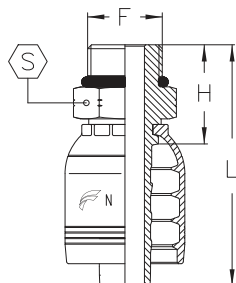
Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FF90S	3/8	1 1/16 - 16	31.5	1.24	62.0	2.44	24.5	0.96	22	7/8
N06-08FF90S	3/8	1 3/16 - 16	31.0	1.22	61.0	2.40	30.0	1.18	24	1
N08-06FF90S	1/2	1 1/16 - 16	37.0	1.46	70.0	2.46	24.5	0.96	32	7/8
N08-08FF90S	1/2	1 3/16 - 16	39.0	1.54	72.0	2.83	31.0	1.22	24	1
N08-10FF90S	1/2	1 - 14	39.0	1.54	72.0	2.83	34.0	1.34	30	1 3/16
N08-12FF90S	1/2	1 3/16 - 12	39.0	1.54	72.0	2.83	42.0	1.65	36	1 7/16
N10-10FF90S	5/8	1 - 14	45.0	1.77	81.0	3.19	35.0	1.38	30	1 3/16
N10-12FF90S	5/8	1 3/16 - 12	45.0	1.77	81.0	3.19	42.0	1.65	36	1 7/16
N12-12FF90S	3/4	1 3/16 - 12	54.0	2.13	105.0	4.13	48.0	1.89	36	1 7/16
N12-16FF90S	3/4	1 7/16 - 12	54.0	2.13	105.0	4.13	49.0	1.93	41	1 5/8
N16-12FF90S	1	1 3/16 - 12	71.0	2.80	127.0	5.00	48.0	1.93	36	1 7/16
N16-16FF90S	1	1 7/16 - 12	71.0	2.79	127.0	5.00	62.0	2.44	41	1 5/8
N16-20FF90S	1	1 11/16 - 12	71.0	2.79	127.0	5.00	62.0	2.44	50	2
N20-20FF90S	1 1/4	1 11/16 - 12	87.0	3.42	153.0	6.02	75.0	2.95	50	2
N24-24FF90S	1 1/2	2 - 12	105.0	4.13	187.0	7.36	90.0	3.54	60	2 3/8



FF90L ORFS Female Swivel - 90° Elbow Long Drop



Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FF90L	3/8	1 1/16 - 16	34.0	1.33	64.5	2.53	54.0	2.12	22	7/8
N08-08FF90L	1/2	1 3/16 - 16	39.0	1.53	72.0	2.83	64.0	2.51	24	1
N08-10FF90L	1/2	1 - 14	39.0	1.53	72.0	2.83	64.0	2.51	30	1 3/16
N10-10FF90L	5/8	1 - 14	45.0	1.77	81.0	3.18	70.0	2.75	30	1 3/16
N12-12FF90L	3/4	1 3/16 - 12	54.0	2.13	105.0	4.13	96.0	3.78	36	1 7/16
N16-16FF90L	1	1 7/16 - 12	71.0	2.79	127.0	5.00	114.0	4.49	41	1 5/8
N20-20FF90L	1 1/4	1 11/16 - 12	87.0	3.42	153.0	6.02	130.0	5.12	50	2

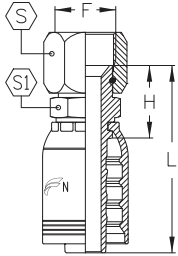
MOB O-Ring Boss Male






Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N06-06MOB	3/8	9/16 - 18	23.5	0.92	54.0	2.12	17	1 1/16
N06-08MOB	3/8	3/4 - 16	26.2	1.03	56.7	2.23	22	7/8
N08-08MOB	1/2	3/4 - 16	27.2	1.07	60.2	2.37	22	7/8
N08-10MOB	1/2	7/8 - 16	29.7	1.17	62.7	2.47	25	1
N08-12MOB	1/2	1 1/16 - 16	33.8	1.33	69.6	2.74	32	1 1/4
N12-12MOB	3/4	1 1/16 - 16	36.0	1.42	87.0	3.43	32	1 1/4
N16-16MOB	1	1 5/16 - 12	39.0	1.54	96.0	3.78	38	1 1/2

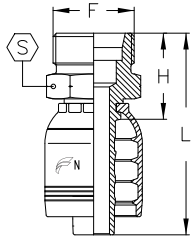
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FK Komatsu Female Swivel



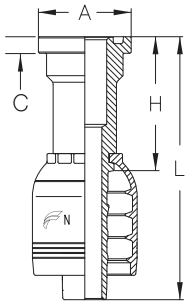
Part Number		F	H		L					
	in		mm	in	mm	in	mm	in	mm	in
N06-18FK	3/8	M18 x 1.5	24.3	0.95	54.8	2.15	24	1	19	3/4
N06-22FK	3/8	M22 x 1.5	29.0	1.14	59.0	2.32	27	1 1/16	22	7/8
N08-18FK	1/2	M18 x 1.5	26.0	1.02	59.0	2.32	24	1	22	7/8
N08-22FK	1/2	M22 x 1.5	26.5	1.04	59.5	2.34	27	1 1/16	27	1 1/16
N08-24FK	1/2	M24 x 1.5	29.9	1.17	62.9	2.47	32	1 1/4	32	1 1/4
N10-24FK	5/8	M24 x 1.5	29.9	1.17	65.9	2.59	32	1 1/4	32	1 1/4
N12-24FK	3/4	M24 x 1.5	33.0	1.30	84.0	3.31	32	1 1/4	32	1 1/4
N12-30FK	3/4	M30 x 1.5	36.0	1.42	87.0	3.43	36	1 7/16	36	1 7/16
N16-33FK	1	M33 x 1.5	38.0	1.50	95.0	3.74	41	1 5/8	36	1 7/16
N16-36FK	1	M36 x 1.5	42.0	1.65	98.0	3.86	46	1 13/16	41	1 5/8
N20-36FK	1 1/4	M36 x 1.5	44.0	1.73	110.5	43.5	46	1 13/16	41	1 5/8


MKBC Kobelco Male



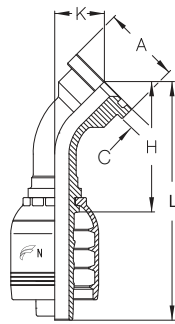
Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N12-30MKBC	3/4	M30 x 1.5	39.2	1.54	90.2	3.55	38	1.50
N12-36MKBC	3/4	M36 x 1.5	39.2	1.54	90.2	3.55	41	1.61
N16-36MKBC	1	M36 x 1.5	42.5	1.67	99.0	3.90	41	1.61
N16-45MKBC	1	M45 x 1.5	45.0	1.77	101.6	4.00	50	1.97


FLK Komatsu Flange



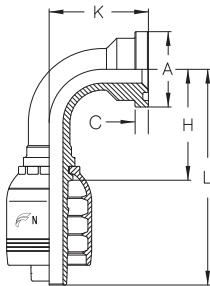
Part Number		C		A		H		L	
	in	mm	mm	in	mm	in	mm	in	
N10-10FLK	5/8	6.0	34.2	1.33	48.0	1.89	80.0	3.15	


FLK45 Komatsu Flange - 45° Elbow





Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N10-10FLK45	5/8	6.0	34.2	1.33	48.0	1.89	84.0	3.30	22.0	0.87	

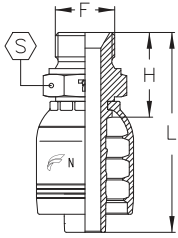
FLK90 Komatsu Flange - 90° Elbow





Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N10-10FLK90-044	5/8	6.0	34.2	1.33	44.0	1.73	74.0	2.91	44.0	1.69	

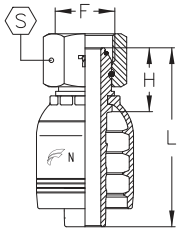
MBSPP BSPP Male

Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N06-06MBSPP	3/8	3/8 - 19	27.0	1.06	58.0	2.28	22	7/8
N06-08MBSPP	3/8	1/2 - 14	32.0	1.25	62.0	2.44	27	1 1/16
N08-08MBSPP	1/2	1/2 - 14	28.0	1.10	67.0	2.63	22	7/8
N10-10MBSPP	5/8	5/8 - 14	35.0	1.37	71.0	2.79	30	1 3/16
N10-12MBSPP	5/8	3/4 - 14	36.0	1.41	72.0	2.83	32	1 1/4
N12-12MBSPP	3/4	3/4 - 14	38.0	1.50	89.0	3.50	32	1 1/4
N12-16MBSPP	3/4	1 - 11	43.0	1.69	91.0	3.58	41	1 5/8
N16-16MBSPP	1	1 - 11	45.0	1.77	101.0	3.98	41	1 5/8
N16-20MBSPP	1	1 1/4 - 11	48.0	1.89	104.0	4.09	50	2
N20-20MBSPP	1 1/4	1 1/4 - 11	50.0	1.97	117.0	4.61	50	2
N24-24MBSPP	1 1/2	1 1/2 - 11	55.0	2.16	138.0	5.43	55	2 1/4
N32-32MBSPP	2	2 - 11	63.0	2.48	159.0	6.26	70	2 3/4



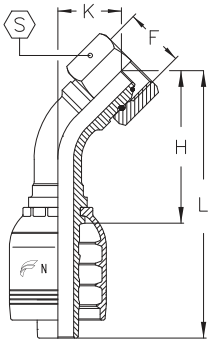
FBSPP BSPP Female Swivel



Part Number		F	H		L			
	in		mm	in	mm	in	mm	in
N06-06FBSPP	3/8	3/8 - 19	21.0	0.83	51.0	2.01	22	7/8
N06-08FBSPP	3/8	1/2 - 14	23.0	0.90	54.0	2.12	27	1 1/16
N08-08FBSPP	1/2	1/2 - 14	23.0	0.90	56.0	2.20	27	1 1/16
N08-10FBSPP	1/2	5/8 - 14	24.0	0.94	57.0	2.24	30	1 3/16
N10-10FBSPP	5/8	5/8 - 14	23.0	0.90	59.0	2.32	30	1 3/16
N10-12FBSPP	5/8	3/4 - 14	27.0	1.06	63.0	2.48	32	1 1/4
N12-12FBSPP	3/4	3/4 - 14	29.0	1.14	80.0	3.15	32	1 1/4
N12-16FBSPP	3/4	1 - 11	32.0	1.26	83.0	3.27	41	1 5/8
N16-16FBSPP	1	1 - 11	34.0	1.34	90.0	3.54	41	1 5/8
N16-20FBSPP	1	1 1/4 - 11	37.0	1.46	93.0	3.66	50	2
N20-20FBSPP	1 1/4	1 1/4 - 11	39.0	1.53	106.0	4.17	50	2
N24-24FBSPP	1 1/2	1 1/2 - 11	43.0	1.69	125.0	4.92	60	2 1/2
N32-32FBSPP	2	2 - 11	47.0	1.85	143.0	5.63	75	3



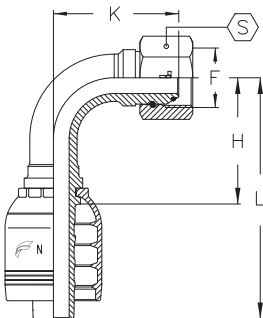
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FBSP45 BSPP Female Swivel - 45° Elbow



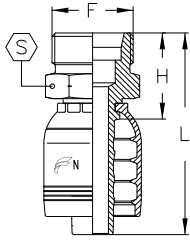
Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FBSP45	3/8	3/8 - 19	42.0	1.65	73.0	2.87	19.0	0.75	22	7/8
N08-08FBSP45	1/2	1/2 - 14	49.0	1.93	82.0	3.23	22.0	0.86	27	1 1/16
N10-10FBSP45	5/8	5/8 - 14	54.0	2.12	90.0	3.54	24.0	0.94	30	1 3/16
N10-12FBSP45	5/8	3/4 - 14	57.0	2.24	93.0	3.66	26.0	1.02	32	1 1/4
N12-12FBSP45	3/4	3/4 - 14	67.0	2.64	118.0	4.64	29.0	1.14	32	1 1/4
N12-16FBSP45	3/4	1 - 11	67.0	2.64	121.0	4.76	32.0	1.26	41	1 5/8
N16-16FBSP45	1	1 - 11	86.0	3.38	142.0	5.62	36.0	1.41	41	1 5/8
N16-20FBSP45	1	1 1/4 - 11	86.0	3.38	143.0	5.59	37.0	1.47	50	2
N20-20FBSP45	1 1/4	1 1/4 - 11	103.0	4.05	169.0	6.65	43.0	1.69	50	2
N24-24FBSP45	1 1/2	1 1/2 - 11	123.0	4.84	206.0	8.11	51.0	2.01	60	2 3/8
N32-32FBSP45	2	2 - 11	160.0	6.30	257.0	1.01	65.0	2.55	75	3



FBSP90 BSPP Female Swivel - 90° Elbow



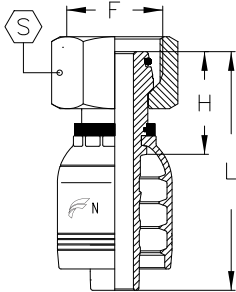
Part Number		F	H		L		K			
	in		mm	in	mm	in	mm	in	mm	in
N06-06FBSP90	3/8	3/8 - 19	31.0	1.22	61.0	2.40	35.0	1.38	22	7/8
N08-08FBSP90	1/2	1/2 - 14	37.0	1.46	70.0	2.75	42.0	1.65	27	1 1/16
N10-10FBSP90	5/8	5/8 - 14	45.0	1.77	80.0	3.15	46.0	1.81	30	1 3/16
N10-12FBSP90	5/8	3/4 - 14	45.0	1.77	80.0	3.15	50.0	1.97	32	1 1/4
N12-12FBSP90	3/4	3/4 - 14	55.0	2.16	106.0	4.17	57.0	2.24	32	1 1/4
N12-16FBSP90	3/4	1 - 11	55.0	2.16	106.0	4.17	57.0	2.24	41	1 5/8
N16-16FBSP90	1	1 - 11	71.0	2.79	128.0	5.04	72.0	2.83	41	1 5/8
N16-20FBSP90	1	1 1/4 - 11	71.0	2.79	128.0	5.04	72.0	2.83	50	2
N20-20FBSP90	1 1/4	1 1/4 - 11	87.0	3.42	154.0	6.06	88.0	3.46	50	2
N24-24FBSP90	1 1/2	1 1/2 - 11	105.0	4.13	188.0	7.40	104.0	4.09	60	2 3/8
N32-32FBSP90	2	2 - 11	140.0	5.51	237.0	9.33	137.0	5.39	75	3



MML Metric 24° Male Light - (CEL)



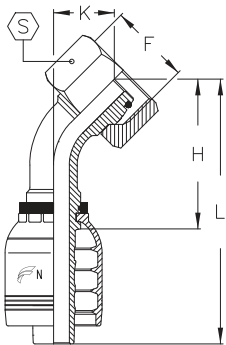
Part Number		F	Tube	H		L			
	in			mm	in	mm	in	mm	in
N06-18MML	3/8	M18 x 1.5	L12	23	0.90	53	2.08	19	3/4
N08-22MML	1/2	M22 x 1.5	L15	26	1.02	59	2.32	22	7/8
N10-26MML	5/8	M26 x 1.5	L18	28	1.10	64	2.51	27	1 1/16
N12-30MML	3/4	M30 x 2.0	L22	32	1.26	83	3.27	30	1 3/16
N16-36MML	1	M36 x 2.0	L28	36	1.42	93	3.66	36	1 7/16
N20-45MML	1 1/4	M45 x 2.0	L35	43	1.69	109	4.29	46	1 13/16



FML Metric 24° Female Light - (DKOL)



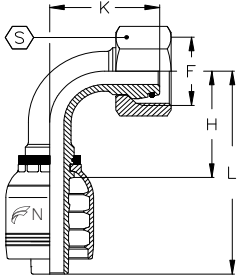
Part Number		F	Tube	H		L			
	in			mm	in	mm	in	mm	in
N06-18FML	3/8	M18 x 1.5	L12	24	0.94	54	2.12	22	7/8
N08-22FML	1/2	M22 x 1.5	L15	24	0.94	57	2.24	27	1 1/16
N10-26FML	5/8	M26 x 1.5	L18	27	1.06	62	2.44	32	1 1/4
N12-30FML	3/4	M30 x 2.0	L22	31	1.22	82	3.23	36	1 7/16
N16-36FML	1	M36 x 2.0	L28	34	1.34	90	3.54	41	1 5/8
N20-45FML	1 1/4	M45 x 2.0	L35	39	1.54	106	4.17	50	2
N24-52FML	1 1/2	M52 x 2.0	L42	43	1.69	126	4.96	60	2 3/8

FML Metric 24° Female Light - 45° Elbow (DKOL)



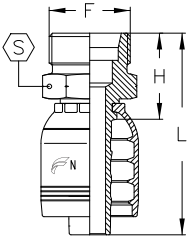
Part Number		F	Tube	H		L		K			
	in			mm	in	mm	in	in	mm	in	
N06-18FML45	3/8	M18 x 1.5	L12	40	1.22	71	2.80	18	.71	22	7/8
N08-22FML45	1/2	M22 x 1.5	L15	46	1.81	79	3.11	19	0.74	27	1 1/16
N10-26FML45	5/8	M26 x 1.5	L18	53	2.08	89	3.50	22	0.86	32	1 1/4
N12-30FML45	3/4	M30 x 2.0	L22	64	2.52	115	4.53	25	0.98	36	1 7/16
N16-36FML45	1	M36 x 2.0	L28	82	3.23	139	5.47	31	1.22	41	1 5/8
N20-45FML45	1 1/4	M45 x 2.0	L35	101	3.98	168	6.61	40	1.57	50	2
N24-52FML45	1 1/2	M52 x 2.0	L42	115	4.53	179	7.05	48	1.89	60	2 3/8

FML90 Metric 24° Female Light - 90° Elbow (DKOL)



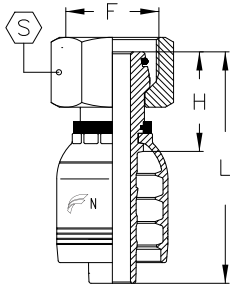
Part Number		F	Tube	H		L		K			
	in			mm	in	mm	in	mm	in	mm	in
N06-18FML90	3/8	M18 x 1.5	L12	31	1.22	61	2.40	33	1.30	22	7/8
N08-22FML90	1/2	M22 x 1.5	L15	37	1.45	70	2.75	38	1.49	27	1 1/16
N10-26FML90	5/8	M26 x 1.5	L18	44	1.73	80	3.14	45	1.77	32	1 1/4
N12-30FML90	3/4	M30 x 2.0	L22	57	2.24	108	4.25	52	2.05	36	1 7/16
N16-36FML90	1	M36 x 2.0	L28	73	2.87	130	5.12	66	2.60	41	1 5/8
N20-45FML90	1 1/4	M45 x 2.0	L35	90	3.54	157	6.18	83	3.27	50	2
N24-52FML90	1 1/2	M52 x 2.0	L42	100	3.94	164	6.46	100	3.94	60	2 3/8

MMS Metric 24° Male Heavy - (CES)



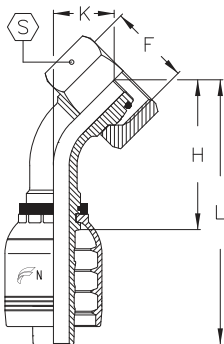
Part Number		F	Tube	H		L			
	in			mm	in	mm	in	mm	in
N06-20MMS	3/8	M20 x 1.5	S12	25.0	0.98	56.0	2.20	22	7/8
N06-22MMS	3/8	M22 x 1.5	S14	27.0	1.06	58.0	2.28	22	7/8
N08-22MMS	1/2	M22 x 1.5	S14	28.0	1.10	61.0	2.40	22	7/8
N08-24MMS	1/2	M24 x 1.5	S16	29.0	1.14	62.0	2.44	24	1
N10-30MMS	5/8	M30 x 2.0	S20	32.0	1.26	68.0	2.68	30	1 3/16
N12-30MMS	3/4	M30 x 2.0	S20	34.0	1.34	85.0	3.35	30	1 3/16
N12-36MMS	3/4	M36 x 2.0	S25	38.0	1.50	89.0	3.50	36	1 7/16
N16-36MMS	1	M36 x 2.0	S25	40.0	1.57	97.0	3.82	36	1 7/16
N16-42MMS	1	M42 x 2.0	S30	44.0	1.73	101.0	3.98	46	1 13/16
N20-42MMS	1 1/4	M42 x 2.0	S30	47.0	1.85	113.0	4.45	46	1 13/16
N20-52MMS	1 1/4	M52 x 2.0	S38	51.0	2.01	117.0	4.61	55	2 1/4
N24-52MMS	1 1/2	M52 x 2.0	S38	53.0	2.09	135.0	5.31	55	2 1/4

FMS Metric 24° Female Heavy - (DKOS)



Part Number		F	Tube	H		L			
	in			mm	in	mm	in	mm	in
N06-18FMS		M18 x 1.5	S10	25.0	0.98	55.0	2.16	22	7/8
N06-20FMS		M20 x 1.5	S12	24.0	0.94	54.0	2.12	24	1
N06-22FMS		M22 x 1.5	S14	28.0	1.10	58.0	2.28	27	1 1/16
N08-22FMS		M22 x 1.5	S14	28.0	1.10	61.0	2.40	27	1 1/16
N08-24FMS		M24 x 1.5	S16	29.0	1.14	62.0	2.44	30	1 3/16
N10-30FMS		M30 x 2.0	S20	33.0	1.30	69.0	2.72	36	1 7/16
N12-30FMS		M30 x 2.0	S20	37.0	1.46	88.0	3.46	36	1 7/16
N12-36FMS		M36 x 2.0	S25	39.0	1.53	90.0	3.54	46	1 13/16
N16-36FMS		M36 x 2.0	S25	41.0	1.61	97.0	3.82	46	1 13/16
N16-42FMS		M42 x 2.0	S30	42.0	1.65	98.0	3.86	50	2
N20-42FMS		M42 x 2.0	S30	43.0	1.69	109.0	4.29	50	2
N20-52FMS		M52 x 2.0	S38	48.0	1.89	115.0	4.53	60	2 3/8
N24-52FMS		M52 x 2.0	S38	51.0	2.01	133.0	5.24	60	2 3/8

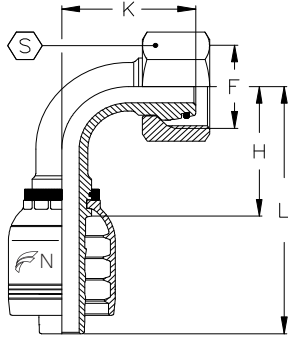
FMS45 Metric 24° Female Heavy - 45° Elbow (DKOS)



Part Number		F	Tube	H		L		K			
	in			mm	in	mm	in	mm	in	mm	in
N06-18FMS45		M18 x 1.5	S10	40.0	1.57	70.0	2.75	17.0	0.67	22	7/8
N06-20FMS45		M20 x 1.5	S12	40.0	1.57	71.0	2.79	18.0	0.71	24	1
N06-22FMS45		M22 x 1.5	S14	42.0	1.65	72.0	2.83	19.0	0.75	27	1 1/16
N08-22FMS45		M22 x 1.5	S14	46.0	1.81	79.0	3.11	20.0	0.78	27	1 1/16
N08-24FMS45		M24 x 1.5	S16	47.0	1.85	80.0	3.15	21.0	0.83	30	1 3/16
N10-30FMS45		M30 x 2.0	S20	56.0	2.20	92.0	3.62	25.0	0.98	36	1 7/16
N12-30FMS45		M30 x 2.0	S20	65.0	2.56	116.0	4.57	27.0	1.06	36	1 7/16
N12-36FMS45		M36 x 2.0	S25	66.0	2.60	117.0	4.61	28.0	1.10	46	1 13/16
N16-36FMS45		M36 x 2.0	S25	83.0	3.27	140.0	5.51	34.0	1.34	46	1 13/16
N16-42FMS45		M42 x 2.0	S30	82.0	3.23	138.0	5.43	32.0	1.26	50	2
N20-42FMS45		M42 x 2.0	S30	100.0	3.94	166.0	6.53	40.0	1.57	50	2
N20-52FMS45		M52 x 2.0	S38	97.0	3.82	164.0	6.46	38.0	1.50	60	2 3/8
N24-52FMS45		M52 x 2.0	S38	121.0	4.76	203.0	7.99	48.0	1.89	60	2 3/8

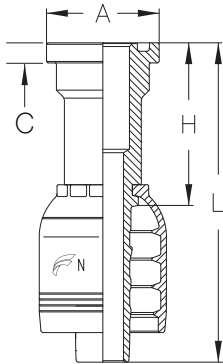
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FMS90 Metric 24° Female Heavy - 90° Elbow - (DKOS)



Part Number	in	F	Tube	H		L		K		S	
				mm	in	mm	in	mm	in	mm	in
N06-18FMS90	3/8	M18 x 1.5	S10	30.0	1.18	61.0	2.40	33.0	1.30	22	7/8
N06-20FMS90	3/8	M20 x 1.5	S12	31.0	1.22	61.0	2.40	33.0	1.30	24	1
N06-22FMS90	3/8	M22 x 1.5	S14	34.0	1.34	64.0	2.52	37.0	1.46	27	1 1/16
N08-24FMS90	1/2	M24 x 1.5	S16	39.0	1.53	71.0	2.79	42.0	1.65	30	1 3/16
N10-30FMS90	5/8	M30 x 2.0	S20	44.0	1.73	80.0	3.15	49.0	1.93	36	1 7/16
N12-30FMS90	3/4	M30 x 2.0	S20	55.0	2.16	106.0	4.17	55.0	2.16	36	1 7/16
N12-36FMS90	3/4	M36 x 2.0	S25	55.0	2.16	106.0	4.17	55.0	2.16	46	1 13/16
N16-36FMS90	1	M36 x 2.0	S25	71.0	2.79	128.0	5.04	69.0	2.72	46	1 13/16
N16-42FMS90	1	M42 x 2.0	S30	71.0	2.79	128.0	5.04	67.0	2.64	50	2
N20-42FMS90	1 1/4	M42 x 2.0	S30	87.0	3.42	154.0	6.06	83.0	3.27	50	2
N20-52FMS90	1 1/4	M52 x 2.0	S38	87.0	3.42	154.0	6.06	80.0	3.15	60	2 3/8
N24-52FMS90	1 1/2	M52 x 2.0	S38	105.0	4.13	188.0	7.40	100.0	3.94	60	2 3/8

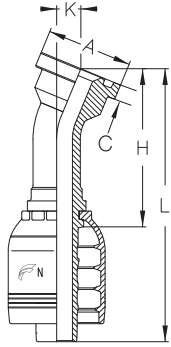
FL Code 61 Flange




Part Number	in	C	A		H		L	
			mm	in	mm	in	mm	in
N08-08FL	1/2	6.7	30.2	1.19	48.5	1.91	61.5	2.42
N08-12FL	1/2	6.7	38.1	1.50	52.5	2.07	85.5	3.37
N10-12FL	5/8	6.7	38.1	1.50	52.5	2.07	88.5	3.48
N12-12FL	3/4	6.7	38.1	1.50	55.0	2.16	106.0	4.17
N12-16FL	3/4	8.0	44.5	1.75	57.0	2.24	108.0	4.25
N12-20FL	3/4	8.0	50.8	2.00	55.0	2.16	106.0	4.17
N16-12FL	1	6.7	38.1	1.50	58.0	2.28	114.5	4.51
N16-16FL	1	8.0	44.5	1.75	58.0	2.28	114.5	4.51
N16-20FL	1	8.0	50.8	2.00	63.0	2.48	119.5	4.70
N16-24FL	1	8.0	60.4	2.38	55.0	2.16	115.5	4.55
N20-16FL	1 1/4	8.0	44.5	1.75	64.0	2.52	130.5	5.14
N20-20FL	1 1/4	8.0	50.8	2.00	64.0	2.52	130.5	5.14
N20-24FL	1 1/4	8.0	60.4	2.38	68.0	2.68	134.5	5.29
N20-32FL	1 1/4	9.5	71.4	2.81	75.0	2.95	141.5	5.57
N24-20FL	1 1/2	8.0	50.8	2.00	70.0	2.76	152.0	5.98
N24-24FL	1 1/2	8.0	60.4	2.38	73.0	2.87	155.5	6.12
N24-32FL	1 1/2	9.5	71.4	2.81	76.0	2.99	158.5	6.24
N32-24FL	2	8.0	60.4	2.38	80.0	3.15	174	6.90
N32-32FL	2	9.5	71.4	2.81	77.0	3.03	176.5	6.95
N32-40FL	2	9.5	84.1	3.31	90.0	3.54	186.5	7.34

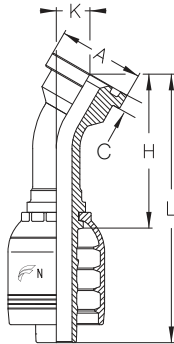
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FL22 Code 61 Flange - 22° Elbow



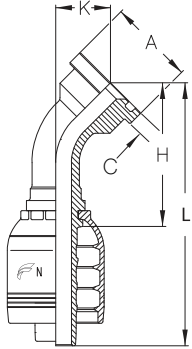
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FL22	3/4	6.7	38.1	1.50	70.0	2.75	121.0	4.76	11.0	0.43	
N12-16FL22	3/4	8.0	44.5	1.75	73.0	2.87	124.0	4.88	12.0	0.47	
N16-16FL22	1	8.0	44.5	1.75	86.0	3.38	142.0	5.59	12.0	0.47	
N16-20FL22	1	8.0	50.8	2.00	86.0	3.38	142.0	5.59	12.0	0.47	
N20-20FL22	1 1/4	8.0	50.8	2.00	100.0	3.94	166.0	6.53	13.0	0.51	
N20-24FL22	1 1/4	8.0	60.3	2.37	100.0	3.94	166.0	6.53	13.0	0.51	
N24-24FL22	1 1/2	8.0	60.3	2.37	118.0	4.64	201.0	7.91	15.0	0.59	
N24-32FL22	1 1/2	9.5	71.4	2.81	116.0	4.57	199.0	7.83	14.0	0.55	
N32-32FL22	2	9.5	71.4	2.81	165.0	6.50	262.0	10.31	22.0	0.86	


FL30 Code 61 Flange - 30° Elbow



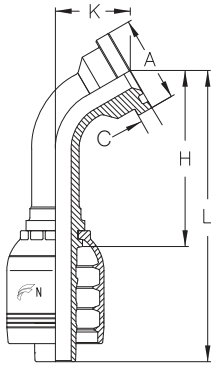
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FL30	3/4	6.7	38.1	1.50	68.0	2.68	119.0	4.68	16.0	0.63	
N12-16FL30	3/4	8.0	44.5	1.75	71.0	2.79	122.0	4.80	17.0	0.67	
N16-16FL30	1	8.0	44.5	1.75	84.0	3.31	140.0	5.51	17.0	0.67	
N16-20FL30	1	8.0	50.8	2.00	84.0	3.31	140.0	5.51	17.0	0.67	
N20-20FL30	1 1/4	8.0	50.8	2.00	98.0	3.86	164.0	6.46	19.0	0.75	
N20-24FL30	1 1/4	8.0	60.4	2.38	98.0	3.86	164.0	6.46	19.0	0.75	
N24-24FL30	1 1/2	8.0	60.4	2.38	116.0	4.57	199.0	7.83	22.0	0.87	
N24-32FL30	1 1/2	9.5	71.4	2.81	114.0	4.49	197.0	7.75	21.0	0.83	
N32-32FL30	2	9.5	71.4	2.81	162.0	6.38	258.0	10.16	31.0	1.22	


FL45 Code 61 Flange - 45° Elbow



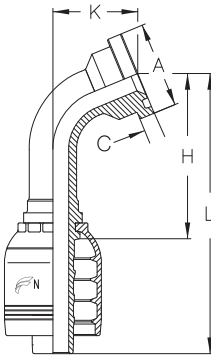
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N08-08FL45	½	6.7	30.2	1.19	38.0	1.50	71.0	2.80	40.0	1.57	
N08-12FL45	½	6.7	38.1	1.50	38.0	1.50	71.0	2.80	45.0	1.77	
N10-12FL45	¾	6.7	38.1	1.50	45.0	1.77	81.0	3.19	47.0	1.85	
N12-12FL45	¾	6.7	38.1	1.50	63.0	2.48	114.0	4.49	16.0	0.98	
N12-16FL45	¾	8.0	44.5	1.75	65.0	2.56	116.0	4.57	17.0	1.06	
N12-20FL45	¾	8.0	50.8	2.00	63.0	2.48	116.0	4.57	25.0	1.00	
N16-12FL45	1	6.7	38.1	1.50	81.0	3.19	137.0	5.39	31.0	1.22	
N16-16FL45	1	8.0	44.5	1.75	78.0	3.31	134.0	4.27	44.0	1.73	
N16-20FL45	1	8.0	50.8	2.00	78.0	3.31	134.0	4.27	31.0	2.01	
N20-16FL45	1	8.0	44.5	1.75	96.0	3.78	163.0	6.42	37.0	1.46	
N20-20FL45	1¼	8.0	50.8	2.00	91.0	3.86	157.0	6.18	32.0	1.26	
N20-24FL45	1¼	8.0	60.3	2.38	91.0	3.86	157.0	6.18	32.0	1.26	
N24-24FL45	1½	8.0	60.3	2.38	108.0	4.57	191.0	7.52	36.0	1.42	
N24-32FL45	1½	9.5	71.4	2.81	107.0	4.49	189.0	7.44	35.0	1.38	
N32-32FL45	2	9.5	71.4	2.81	157.0	6.38	245.0	9.65	57.0	2.24	
N32-40FL45	2	9.5	84.1	3.31	146.0	5.75	243.0	9.57	51.0	2.01	


FL60 Code 61 Flange - 60° Elbow



Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FL60	3/4	6.7	38.1	1.50	77.0	3.03	128.0	5.04	34.0	1.34	
N12-16FL60	3/4	8.0	44.5	1.75	79.0	3.11	130.0	5.12	37.0	1.46	
N16-16FL60	1	8.0	44.5	1.75	98.0	3.86	154.0	6.06	40.0	1.57	
N16-20FL60	1	8.0	50.8	2.00	98.0	3.86	154.0	6.06	40.0	1.57	
N20-20FL60	1 1/4	8.0	50.8	2.00	118.0	4.64	184.0	7.24	45.0	1.77	
N20-24FL60	1 1/4	8.0	60.4	2.38	118.0	4.64	184.0	7.24	45.0	1.77	
N24-24FL60	1 1/2	8.0	60.4	2.38	140.0	5.51	223.0	8.78	52.0	2.05	
N24-32FL60	1 1/2	9.5	71.4	2.81	139.0	5.47	222.0	8.74	50.0	1.97	
N32-32FL60	2	9.5	71.4	2.81	192.0	7.56	289.0	11.38	73.0	2.87	

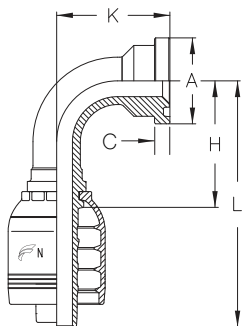
FL67 Code 61 Flange - 67° Elbow




Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FL67	3/4	6.7	38.1	1.50	72.0	2.83	123.0	4.84	39.0	1.53	
N12-16FL67	3/4	6.7	44.5	1.75	73.0	2.87	124.0	4.88	41.0	1.61	
N16-16FL67	1	8.0	44.5	1.75	92.0	3.62	148.0	5.83	45.0	1.77	
N16-20FL67	1	8.0	50.8	2.00	92.0	3.62	148.0	5.83	45.0	1.77	
N20-20FL67	1 1/4	8.0	50.8	2.00	111.0	4.37	178.0	7.01	52.0	2.05	
N20-24FL67	1 1/4	8.0	60.4	2.38	111.0	4.37	178.0	7.01	52.0	2.05	
N24-24FL67	1 1/2	8.0	60.4	2.38	133.0	5.24	216.0	8.50	60.0	2.36	
N24-32FL67	1 1/2	9.5	71.4	2.81	132.0	5.20	215.0	8.46	58.0	2.28	
N32-32FL67	2	9.5	71.4	2.81	181.0	7.12	278.0	10.94	84.0	3.31	

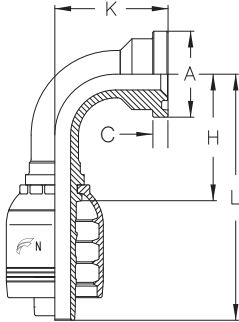
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FL90 Code 61 Flange - 90° Elbow



Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N08-08FL90-042	1/2	6.7	30.2	1.19	41.0	1.61	74.0	2.91	42.0	1.65	
N08-12FL90-050	1/2	6.7	38.1	1.50	41.0	1.61	74.0	2.91	50.0	1.97	
N10-12FL90-047	5/8	6.7	38.1	1.50	49.0	1.93	85.0	3.35	47.0	2.17	
N12-12FL90-051	3/4	6.7	38.1	1.50	55.0	2.16	106.0	4.17	51.0	2.00	
N12-12FL90-096	3/4	6.7	38.1	1.50	55.0	2.16	106.0	4.17	96.0	3.77	
N12-12FL90-127	3/4	6.7	38.1	1.50	55.0	2.16	106.0	4.17	127.0	5.00	
N12-12FL90-150	3/4	6.7	38.1	1.50	55.0	2.16	106.0	4.17	150.0	5.90	
N12-16FL90-055	3/4	8.0	44.5	1.75	55.0	2.16	106.0	4.17	55.0	2.16	
N12-16FL90-079	3/4	8.0	44.5	1.75	55.0	2.16	106.0	4.17	79.0	3.11	
N12-20FL90-060	3/4	8.0	50.8	2.00	55.0	2.16	106.0	4.17	60.0	2.36	
N16-12FL90-065	3/4	6.7	38.1	1.50	71.0	2.79	128.0	5.03	65.0	2.56	
N16-16FL90-061	1	8.0	44.5	1.75	71.0	2.79	128.0	5.03	61.0	2.40	
N16-16FL90-118	1	8.0	44.5	1.75	71.0	2.79	128.0	5.03	118.0	4.64	
N16-16FL90-158	1	8.0	44.5	1.75	71.0	2.79	128.0	5.03	158.0	6.22	
N16-20FL90-061	1	8.0	50.8	2.00	71.0	2.79	128.0	5.03	61.0	2.40	
N16-20FL90-118	1	8.0	50.8	2.00	71.0	2.79	128.0	5.03	118.0	4.64	
N16-24FL90-061	1	8.0	60.4	2.38	71.0	2.79	128.0	5.03	61.0	2.40	
N20-16FL90-079	1 1/4	8.0	44.5	1.75	87.0	3.42	154.0	6.06	79.0	3.11	
N20-20FL90-071	1 1/4	8.0	50.8	2.00	87.0	3.42	154.0	6.06	71.0	2.79	
N20-20FL90-091	1 1/4	8.0	50.8	2.00	87.0	3.42	154.0	6.06	91.0	3.58	
N20-20FL90-102	1 1/4	8.0	50.8	2.00	87.0	3.42	154.0	6.06	102.0	4.01	
N20-20FL90-112	1 1/4	8.0	50.8	2.00	87.0	3.42	154.0	6.06	112.0	4.40	
N20-20FL90-130	1 1/4	8.0	50.8	2.00	87.0	3.42	154.0	6.06	130.0	5.11	
N20-20FL90-168	1 1/4	8.0	50.8	2.00	87.0	3.42	154.0	6.06	168.0	6.61	
N20-24FL90-071	1 1/4	8.0	60.3	2.37	87.0	3.42	154.0	6.06	71.0	2.79	
N20-24FL90-118	1 1/4	8.0	60.3	2.37	87.0	3.42	154.0	6.06	118.0	4.64	
N20-24FL90-130	1 1/4	8.0	60.3	2.37	87.0	3.42	154.0	6.06	130.0	5.11	

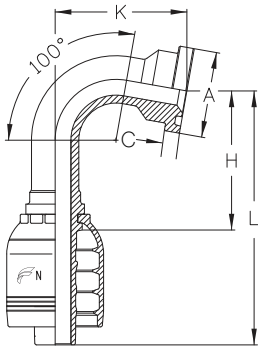
FL90 Code 61 Flange - 90° Elbow




Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N24-20FL90-090	1½	8.0	50.8	2.00	98.0	3.85	180.0	7.09	90.0	3.54	
N24-24FL90-083	1½	8.0	60.4	2.38	105.0	4.13	188.0	7.40	83.0	3.26	
N24-24FL90-102	1½	8.0	60.4	2.38	105.0	4.13	188.0	7.40	102.0	4.01	
N24-24FL90-148	1½	8.0	60.4	2.38	105.0	4.13	188.0	7.40	148.0	5.82	
N24-24FL90-172	1½	8.0	60.4	2.38	105.0	4.13	188.0	7.40	172.0	6.77	
N24-32FL90-081	1½	9.5	71.4	2.81	105.0	4.13	188.0	7.40	81.0	3.18	
N24-32FL90-115	1½	9.5	71.4	2.81	105.0	4.13	188.0	7.40	115.0	4.52	
N24-32FL90-172	1½	8.0	71.4	2.81	105.0	4.13	188.0	7.40	172.0	6.77	
N32-24FL90-081	2	8.0	60.3	2.37	136.0	5.38	233.0	9.18	81.0	3.19	
N32-24FL90-105	2	8.0	60.3	2.37	136.0	5.38	233.0	9.18	105.0	4.13	
N32-24FL90-152	2	8.0	60.3	2.37	136.0	5.38	233.0	9.18	152.0	5.98	
N32-24FL90-228	2	8.0	60.3	2.37	136.0	5.38	233.0	9.18	228.0	8.98	
N32-32FL90-122	2	9.5	71.4	2.81	140.0	5.51	237.0	9.33	122.0	4.80	
N32-32FL90-165	2	9.5	71.4	2.81	140.0	5.51	237.0	9.33	165.0	6.49	
N32-32FL90-203	2	9.5	71.4	2.81	140.0	5.51	237.0	9.33	203.0	7.99	
N32-40FL90-117	2	9.5	84.1	3.31	140.0	5.51	237.0	9.33	117.0	4.60	

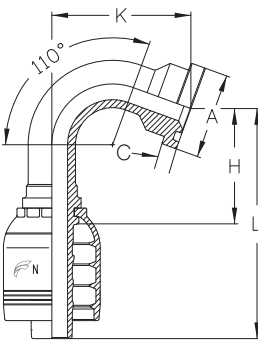
BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.


FL100 Code 61 Flange - 100° Elbow



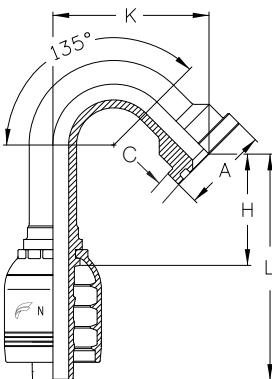
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FL100-060	3/4	6.7	38.1	1.50	61.0	2.40	112.0	4.41	60.0	2.36	
N16-16FL100-073	1	8.0	44.5	1.75	77.0	3.03	134.0	5.27	73.0	2.87	


FL110 Code 61 Flange - 110° Elbow



Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FL110-064	3/4	6.7	38.1	1.50	51.0	2.01	102.0	4.01	64.0	2.52	
N16-16FL110-073	1	6.7	44.5	1.75	65.0	2.56	121.0	4.76	73.0	2.87	
N16-20FL110-073	1	8.0	50.8	2.00	65.0	2.56	121.0	4.76	73.0	2.87	
N20-20FL110-080	1 1/4	8.0	50.8	2.00	82.0	3.23	148.0	5.83	80.0	3.15	
N20-24FL110-081	1 1/4	8.0	60.4	2.38	82.0	3.23	148.0	5.83	81.0	3.19	
N24-24FL110-095	1 1/2	8.0	60.4	2.38	95.0	3.74	178.0	7.01	95.0	3.74	
N32-32FL110-140	2	9.5	71.4	2.81	124.0	4.88	220.0	8.66	140.0	5.51	

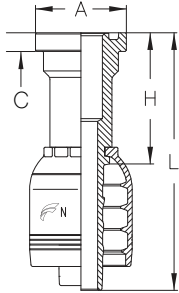
FL135 Code 61 Flange - 135° Elbow




Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FL135-069	3/4	6.7	38.1	1.50	69.0	2.72	120.0	4.72	69.0	2.72	
N12-16FL135-070	3/4	6.7	44.5	1.75	69.0	2.72	120.0	4.72	70.0	2.76	
N16-16FL135-088	1	8.0	44.5	1.75	57.0	2.24	113.0	4.45	88.0	3.46	

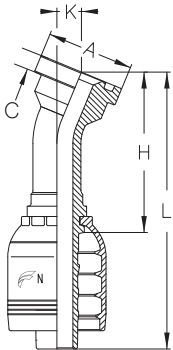
BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.


FLH Code 62 Flange



Part Number		C		A		H		L	
	in	mm	mm	in	mm	in	mm	in	
N08-08FLH	1/2	7.8	31.7	1.25	49.5	1.95	82.5	3.25	
N08-12FLH	1/2	8.8	41.3	1.62	52.5	2.07	89.0	3.50	
N10-12FLH	5/8	8.8	41.3	1.62	59.5	2.34	95.5	3.76	
N12-12FLH	3/4	8.8	41.3	1.62	59.5	2.34	110.0	4.33	
N12-16FLH	3/4	9.5	47.6	1.87	61.0	2.40	112.0	4.41	
N16-12FLH	1	8.8	41.3	1.62	65.0	2.56	121.5	4.78	
N16-16FLH	1	9.5	47.6	1.87	65.0	2.56	121.5	4.78	
N16-20FLH	1	10.3	54.0	2.12	69.0	2.72	125.5	4.94	
N20-16FLH	1 1/4	9.5	47.6	1.87	70.0	2.75	136.5	5.37	
N20-20FLH	1 1/4	10.3	54.0	2.12	70.0	2.75	136.5	5.37	
N20-24FLH	1 1/4	12.6	63.5	2.50	80.0	3.15	146.5	5.77	
N24-24FLH	1 1/2	12.6	63.5	2.50	84.0	3.31	116.5	4.59	
N24-20FLH	1 1/2	10.3	54.0	2.12	72.0	2.83	154.0	6.06	
N24-32FLH	1 1/2	12.6	79.4	3.12	99.0	3.90	181.5	7.14	
N32-32FLH	2	12.6	79.4	3.12	100.0	3.94	196.5	7.74	

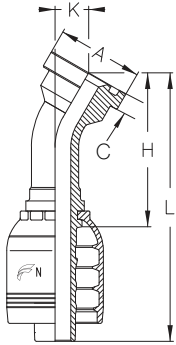
FLH22 Code 62 Flange - 22° Elbow




Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLH22	3/4	8.8	41.3	1.62	74.0	2.91	125.0	4.92	13.0	0.51	
N12-16FLH22	3/4	9.5	47.6	1.87	76.0	2.99	127.0	5.00	14.0	0.55	
N16-16FLH22	1	9.5	47.6	1.87	89.0	3.50	145.0	5.70	13.0	0.51	
N16-20FLH22	1	10.3	54.0	2.12	89.0	3.50	145.0	5.70	13.0	0.51	
N20-20FLH22	1 1/4	10.3	54.0	2.12	103.0	4.05	169.0	6.65	15.0	0.59	
N20-24FLH22	1 1/4	12.6	63.5	2.50	104.0	4.09	171.0	6.73	15.0	0.59	
N24-24FLH22	1 1/2	12.6	63.5	2.50	123.0	4.84	206.0	8.11	17.0	0.66	
N24-32FLH22	1 1/2	12.6	79.4	3.12	127.0	5.00	210.0	8.26	19.0	0.74	
N32-32FLH22	2	12.6	79.4	3.12	166.0	6.53	263.0	10.35	24.0	0.94	

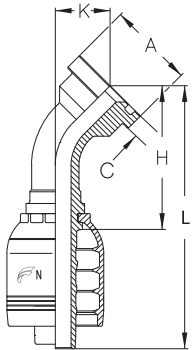
BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.


FLH30 Code 62 Flange - 30° Elbow



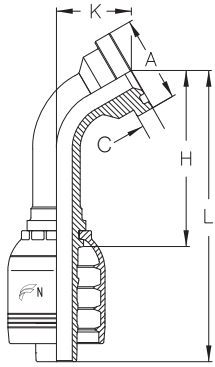
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLH30	3/4	8.8	41.3	1.62	72.0	2.83	123.0	4.84	18.0	0.70	
N12-16FLH30	3/4	9.5	47.6	1.87	74.0	2.91	125.0	4.92	19.0	0.74	
N16-16FLH30	1	9.5	47.6	1.87	87.0	3.42	143.0	5.62	19.0	0.74	
N16-20FLH30	1	10.3	54.0	2.12	87.0	3.42	143.0	5.62	19.0	0.74	
N20-20FLH30	1 1/4	10.3	54.0	2.12	100.0	3.93	167.0	6.57	20.0	0.78	
N20-24FLH30	1 1/4	12.6	63.5	2.50	102.0	4.01	168.0	6.61	21.0	0.82	
N24-24FLH30	1 1/2	12.6	63.5	2.50	121.0	4.76	203.0	7.99	24.0	0.94	
N24-32FLH30	1 1/2	12.6	79.4	3.12	124.0	4.88	207.0	8.14	26.0	1.02	
N32-32FLH30	2	12.6	79.4	3.12	162.0	6.37	259.0	10.19	34.0	1.33	


FLH45 Code 62 Flange - 45° Elbow



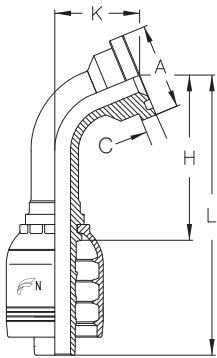
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N08-08FLH45	1/2	7.8	31.7	1.25	63.0	2.48	96.0	3.78	23.5	0.93	
N08-12FLH45	1/2	8.8	41.3	1.62	68.5	2.70	101.5	4.00	29.0	1.14	
N10-12FLH45	5/8	8.8	41.3	1.62	81.5	3.21	117.5	4.63	29.5	1.16	
N12-12FLH45	3/4	8.8	41.3	1.62	66.0	2.59	117.0	4.60	28.0	1.10	
N12-16FLH45	3/4	9.5	47.6	1.87	68.0	2.67	118.0	4.64	29.0	1.14	
N16-12FLH45	1	8.8	41.3	1.62	81.0	3.18	137.0	5.39	31.0	1.22	
N16-16FLH45	1	9.5	47.6	1.87	80.0	3.14	136.0	5.35	30.0	1.18	
N16-20FLH45	1	10.3	54.0	2.12	80.0	3.14	136.0	5.35	30.0	1.18	
N20-16FLH45	1 1/4	9.5	47.6	1.87	96.0	3.77	163.0	6.41	37.0	1.45	
N20-20FLH45	1 1/4	10.3	54.0	2.12	93.0	3.66	160.0	6.29	34.0	1.33	
N20-24FLH45	1 1/4	12.6	63.5	2.50	94.0	3.70	161.0	6.33	35.0	1.37	
N24-24FLH45	1 1/2	12.6	63.5	2.50	112.0	4.40	195.0	7.67	40.0	1.57	
N24-32FLH45	1 1/2	12.6	79.4	3.12	115.0	4.52	198.0	7.79	43.0	1.69	
N32-32FLH45	2	12.6	79.4	3.12	150.0	5.90	247.0	9.72	56.0	2.20	


FLH60 Code 62 Flange - 60° Elbow



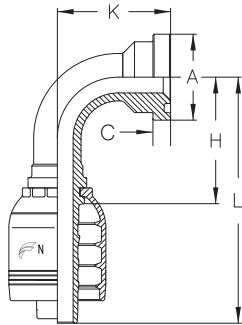
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLH60	3/4	8.8	41.3	1.63	79.0	3.11	130.0	5.12	38.0	1.50	
N12-16FLH60	3/4	9.5	47.6	1.87	80.0	3.15	131.0	5.16	40.0	1.57	
N16-16FLH60	1	9.5	47.6	1.87	99.0	3.90	155.0	6.10	42.0	1.65	
N16-20FLH60	1	10.3	54.0	2.12	99.0	3.90	155.0	6.10	42.0	1.65	
N20-20FLH60	1 1/4	10.3	54.0	2.12	119.0	4.68	185.0	7.28	47.0	1.85	
N20-24FLH60	1 1/4	12.6	63.5	2.50	120.0	4.72	186.0	7.32	49.0	1.93	
N24-24FLH60	1 1/2	12.6	63.5	2.50	143.0	5.62	225.0	8.85	56.0	2.20	
N24-32FLH60	1 1/2	12.6	79.4	3.12	145.0	5.71	228.0	8.98	60.0	2.36	
N32-32FLH60	2	12.6	79.4	3.12	193.0	7.59	289.0	11.37	79.0	3.11	


FLH67 Code 62 Flange - 67° Elbow



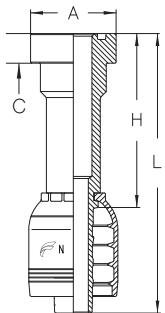
Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLH67	3/4	8.8	41.3	1.63	74.0	2.91	125.0	4.92	43.0	1.69	
N12-16FLH67	3/4	9.5	47.6	1.87	75.0	2.95	126.0	4.96	45.0	1.77	
N16-16FLH67	1	9.5	47.6	1.87	93.0	3.66	150.0	5.90	48.0	1.88	
N16-20FLH67	1	10.3	54.0	2.12	93.0	3.66	150.0	5.90	48.0	1.88	
N20-20FLH67	1 1/4	10.3	54.0	2.12	112.0	4.40	179.0	7.04	54.0	2.12	
N20-24FLH67	1 1/4	12.6	63.5	2.50	113.0	4.45	180.0	7.09	56.0	2.20	
N24-24FLH67	1 1/2	12.6	63.5	2.50	135.0	5.31	217.0	8.54	65.0	2.55	
N24-32FLH67	1 1/2	12.6	79.4	3.12	137.0	5.39	219.0	8.62	69.0	2.72	
N32-32FLH67	2	12.6	79.4	3.12	182.0	7.16	278.0	10.94	90.0	3.54	

FLH90 Code 62 Flange - 90° Elbow




Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N08-08FLH90-042	1/2	7.8	31.7	1.25	41.0	1.61	74.0	2.91	42.0	1.65	
N08-12FLH90-050	1/2	8.8	41.3	1.62	41.0	1.61	74.0	2.91	50.0	1.97	
N10-12FLH90-055	5/8	8.8	41.3	1.62	49.0	1.93	85.0	3.35	55.0	2.17	
N12-12FLH90-056	3/4	8.8	41.3	1.62	55.0	2.16	106.0	4.17	56.0	2.20	
N12-12FLH90-100	3/4	8.8	41.3	1.62	55.0	2.16	106.0	4.17	100.0	3.93	
N12-12FLH90-175	3/4	8.8	44.3	1.62	55.0	2.16	106.0	4.17	175.0	6.89	
N12-16FLH90-058	3/4	9.5	47.6	1.87	55.0	2.16	106.0	4.17	58.0	2.28	
N12-16FLH90-140	3/4	9.5	47.6	1.87	55.0	2.16	106.0	4.17	140.0	5.51	
N16-12FLH90-065	1	8.8	41.3	1.62	71.0	2.79	128.0	5.03	65.0	2.55	
N16-16FLH90-064	1	9.5	47.6	1.87	71.0	2.79	128.0	5.03	64.0	2.51	
N16-16FLH90-120	1	9.5	47.6	1.87	71.0	2.79	128.0	5.03	120.0	4.72	
N16-16FLH90-150	1	9.5	47.6	1.87	71.0	2.79	128.0	5.03	150.0	5.90	
N16-20FLH90-064	1	10.3	54.0	2.12	71.0	2.79	128.0	5.03	64.0	2.51	
N20-16FLH90-079	1 1/4	9.5	47.6	1.87	87.0	3.42	154.0	6.06	79.0	3.11	
N20-20FLH90-074	1 1/4	10.3	54.0	2.12	87.0	3.42	154.0	6.06	74.0	2.91	
N20-20FLH90-120	1 1/4	10.3	54.0	2.12	87.0	3.42	154.0	6.06	120.0	4.72	
N20-20FLH90-180	1 1/4	10.3	54.0	2.12	87.0	3.45	154.0	6.06	180.0	7.08	
N20-24FLH90-076	1 1/4	12.6	63.5	2.50	87.0	3.42	154.0	6.06	76.0	2.99	
N24-24FLH90-088	1 1/2	12.6	63.5	2.50	105.0	4.13	188.0	7.40	88.0	3.46	
N24-32FLH90-093	1 1/2	12.6	79.4	3.12	105.0	4.13	188.0	7.40	93.0	3.66	
N32-32FLH90-123	2	12.6	79.4	3.12	140.0	5.51	237.0	9.33	123.0	4.84	

FLC CAT® Flange

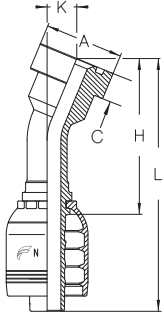


Use with D-Ring


Part Number		C		A		H		L	
	in	mm	mm	in	mm	in	mm	in	
N12-12FLC	3/4	14.2	41.3	1.62	84.0	3.30	135.0	5.31	
N12-16FLC	3/4	14.2	47.6	1.87	84.0	3.30	135.0	5.31	
N16-16FLC	1	14.2	47.6	1.87	90.0	3.54	146.5	5.76	
N16-20FLC	1	14.2	54.0	2.12	90.0	3.54	146.5	5.76	
N20-20FLC	1 1/4	14.2	54.0	2.12	88.0	3.46	154.4	6.07	
N20-24FLC	1 1/4	14.2	63.5	2.50	88.0	3.46	154.5	6.07	
N24-24FLC	1 1/2	14.2	63.5	2.50	84.0	3.31	166.0	6.53	
N24-32FLC	1 1/2	14.2	79.4	3.12	110.0	4.33	192.0	7.56	
N32-32FLC	2	14.2	79.4	3.12	130.0	5.12	220.0	8.90	

BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.

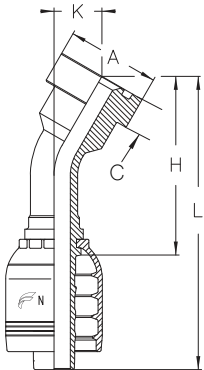
FLC22 CAT® Flange - 22° Elbow




Use with D-Ring

Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLC22	3/4	14.2	41.3	1.62	82.0	3.22	133.0	5.23	16.0	0.62	
N12-16FLC22	3/4	14.2	47.6	1.87	84.0	3.30	135.0	5.31	17.0	0.66	
N16-16FLC22	1	14.2	47.6	1.87	97.0	3.81	153.0	6.02	17.0	0.66	
N16-20FLC22	1	14.2	54.0	2.12	97.0	3.81	153.0	6.02	17.0	0.66	
N20-20FLC22	1 1/4	14.2	54.0	2.12	106.0	4.17	172.0	6.77	16.0	0.62	
N20-24FLC22	1 1/4	14.2	63.5	2.50	106.0	4.17	174.0	6.85	16.0	0.62	
N24-24FLC22	1 1/2	14.2	63.5	2.50	125.0	4.92	208.0	8.19	18.0	0.71	
N24-32FLC22	1 1/2	14.2	79.4	3.12	129.0	5.08	211.0	8.31	19.0	0.75	
N32-32FLC22	2	14.2	79.4	3.12	168.0	6.61	265.0	10.43	25.0	0.98	

FLC30 CAT® Flange - 30° Elbow

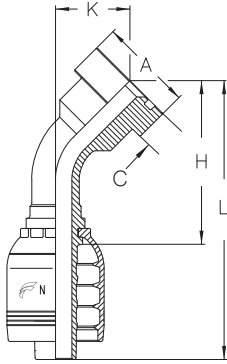


Use with D-Ring


Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLC30	3/4	14.2	41.3	1.62	79.0	3.11	130.0	5.11	22.0	0.86	
N12-16FLC30	3/4	14.2	47.6	1.87	82.0	3.22	133.0	5.23	23.0	0.90	
N16-16FLC30	1	14.2	47.6	1.87	94.0	3.70	151.0	5.94	23.0	0.90	
N16-20FLC30	1	14.2	54.0	2.12	94.0	3.70	151.0	5.94	23.0	0.90	
N20-20FLC30	1 1/4	14.2	54.0	2.12	103.0	4.05	170.0	6.69	22.0	0.86	
N20-24FLC30	1 1/4	14.2	63.5	2.50	104.0	4.09	170.0	6.69	23.0	0.90	
N24-24FLC30	1 1/2	14.2	63.5	2.50	123.0	4.84	205.0	8.07	25.0	0.98	
N24-32FLC30	1 1/2	14.2	79.4	3.12	126.0	4.96	208.0	8.19	27.0	1.06	
N32-32FLC30	2	14.2	79.4	3.12	164.0	6.46	264.0	10.39	35.0	1.38	

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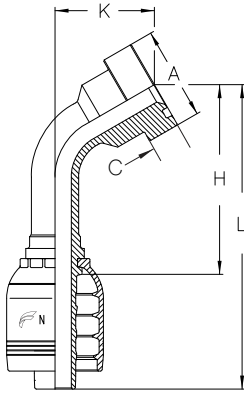
FLC45 CAT® Flange - 45° Elbow




Use with D-Ring

Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLC45	3/4	14.2	41.3	1.62	72	2.83	123.0	4.84	34.0	1.33	
N12-16FLC45	3/4	14.2	47.6	1.87	74	2.91	125.0	4.92	36.0	1.41	
N16-16FLC45	1	14.2	47.6	1.87	86	3.38	143.0	5.62	36.0	1.41	
N16-20FLC45	1	14.2	54.0	2.12	86	3.38	143.0	5.62	36.0	1.41	
N20-20FLC45	1 1/4	14.2	54.0	2.12	96	3.77	162.0	6.37	36.0	1.41	
N20-24FLC45	1 1/4	14.2	63.5	2.50	96	3.77	162.0	6.37	36.0	1.41	
N24-24FLC45	1 1/2	14.2	63.5	2.50	114.0	4.49	196.0	7.72	41.0	1.61	
N24-32FLC45	1 1/2	14.2	79.4	3.12	116.0	4.57	199.0	7.83	44.0	1.73	
N32-32FLC45	2	14.2	79.4	3.12	152.0	5.98	250.0	9.84	57.0	2.24	

FLC60 CAT® Flange - 60° Elbow

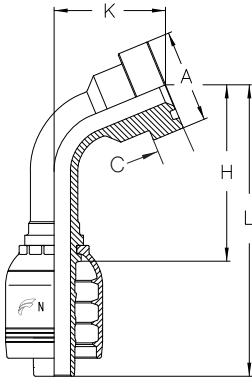


Use with D-Ring


Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLC60	3/4	14.2	41.3	1.62	83.0	3.26	134.0	5.27	45.0	1.77	
N12-16FLC60	3/4	14.2	47.6	1.87	85.0	3.34	136.0	5.35	48.0	1.88	
N16-16FLC60	1	14.2	47.6	1.87	103.0	4.05	160.0	6.29	50.0	1.96	
N16-20FLC60	1	14.2	54.0	2.12	103.0	4.05	160.0	6.29	50.0	1.96	
N20-20FLC60	1 1/4	14.2	54.0	2.12	121.0	4.76	187.0	7.36	50.0	1.96	
N20-24FLC60	1 1/4	14.2	63.5	2.50	121.0	4.76	187.0	7.36	51.0	2.00	
N24-24FLC60	1 1/2	14.2	63.5	2.50	144.0	5.67	226.0	8.90	58.0	2.28	
N24-32FLC60	1 1/2	14.2	79.4	3.12	146.0	5.75	228.0	8.98	61.0	2.40	
N32-32FLC60	2	14.2	79.4	3.12	194.0	7.64	290.0	11.42	81.0	3.19	

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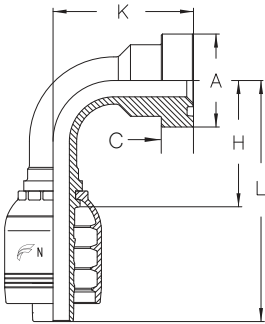
FLC67 CAT® Flange - 67° Elbow




Use with D-Ring

Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLC67	3/4	14.2	41.3	1.62	77.0	3.03	128.0	5.03	50.0	1.96	
N12-16FLC67	3/4	14.2	47.6	1.87	79.0	3.11	130.0	5.11	53.0	2.08	
N16-16FLC67	1	14.2	47.6	1.87	97.0	3.81	153.0	6.02	56.0	2.20	
N20-20FLC67	1 1/4	14.2	54.0	2.12	114.0	4.48	181.0	7.12	57.0	2.24	
N24-24FLC60	1 1/2	14.2	63.5	2.50	137.0	5.39	219.0	8.62	66.0	2.60	
N24-32FLC60	1 1/2	14.2	79.4	3.12	138.0	5.43	220.0	8.66	69.0	2.72	
N32-32FLC60	2	14.2	79.4	3.12	184.0	7.24	280.0	11.02	92.0	3.62	

FLC90 CAT® Flange - 90° Elbow

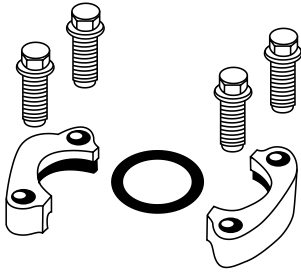


Use with D-Ring

Part Number		C		A		H		L		K	
	in	mm	mm	in	mm	in	mm	in	mm	in	
N12-12FLC90-064	3/4	14.2	41.3	1.62	55.0	2.16	106.0	4.17	64.0	2.52	
N12-12FLC90-129	3/4	14.2	41.3	1.62	55.0	2.16	106.0	4.17	129.0	5.07	
N12-16FLC90-064	3/4	14.2	47.6	1.87	55.0	2.16	106.0	4.17	64.0	2.51	
N16-16FLC90-073	1	14.2	47.6	1.87	71.0	2.79	128.0	5.03	73.0	2.87	
N16-16FLC90-132	1	14.2	47.6	1.87	71.0	2.79	128.0	5.03	132.0	5.19	
N16-16FLC90-150	1	14.2	47.6	1.87	71.0	2.79	128.0	5.03	150.0	5.90	
N16-20FLC90-073	1	14.2	54.0	2.12	71.0	2.79	128.0	5.03	73.0	2.87	
N20-20FLC90-077	1 1/4	14.2	54.0	2.12	87.0	3.42	154.0	6.06	77.0	3.03	
N20-20FLC90-150	1 1/4	14.2	54.0	2.12	87.0	3.42	154.0	6.06	150.0	5.90	
N20-24FLC90-078	1 1/4	14.2	63.5	2.50	87.0	3.42	154.0	6.06	78.0	3.07	
N20-24FLC90-135	1 1/4	14.2	63.5	2.50	87.0	3.42	154.0	6.06	135.0	5.31	
N24-24FLC90-090	1 1/2	14.2	63.5	2.50	105.0	4.13	188.0	7.40	90.0	3.54	
N24-24FLC90-106	1 1/2	14.2	63.5	2.50	87.0	3.42	154.0	6.06	106.0	4.17	
N24-32FLC90-094	1 1/2	14.2	79.4	3.13	105.0	4.13	188.0	7.40	94.0	3.70	
N32-32FLC90-125	2	14.2	79.4	3.13	140.0	5.51	237.0	9.33	125.0	4.92	

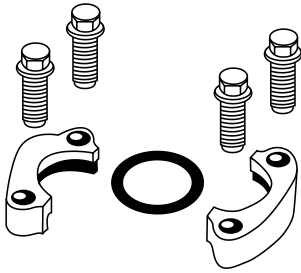
BECAUSE WE CONTINUALLY EXAMINE WAYS TO IMPROVE OUR PRODUCTS, WE RESERVE THE RIGHT TO ALTER SPECIFICATIONS WITHOUT NOTICE.

1901 Code 61 Split Flange Kit



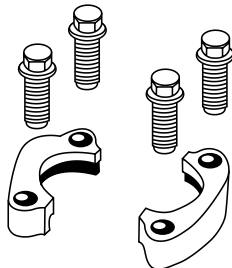
Part Number	Size
1901-08-K	1/2
1901-12-K	3/4
1901-16-K	1
1901-20-K	1 1/4
1901-24-K	1 1/2
1901-32-K	2
1901-40-K	2 1/2

1902 Code 62 Split Flange Kit



Part Number	Size
1902-08-K	1/2
1902-12-K	3/4
1902-16-K	1
1902-20-K	1 1/4
1902-24-K	1 1/2
1902-32-K	2

1903 CAT® Split Flange Kit



D-Ring not included

Part Number	Size
1903-12-K	3/4
1903-16-K	1
1903-20-K	1 1/4
1903-24-K	1 1/2
1903-32-K	2

O-Rings / D-Rings



Size	Standard 61/62 O-Ring	High Pressure 61/62 O-Ring	CAT D-Ring
1/2	OF-08	OO-08	OC-08
3/4	OF-12	OO-12	OC-12
1	OF-16	OO-16	OC-16
1 1/4	OF-20	OO-20	OC-20
1 1/2	OF-24	OO-24	OC-24
2	OF-32	OO-32	OC-32
2 1/2	OF-40	--	--

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