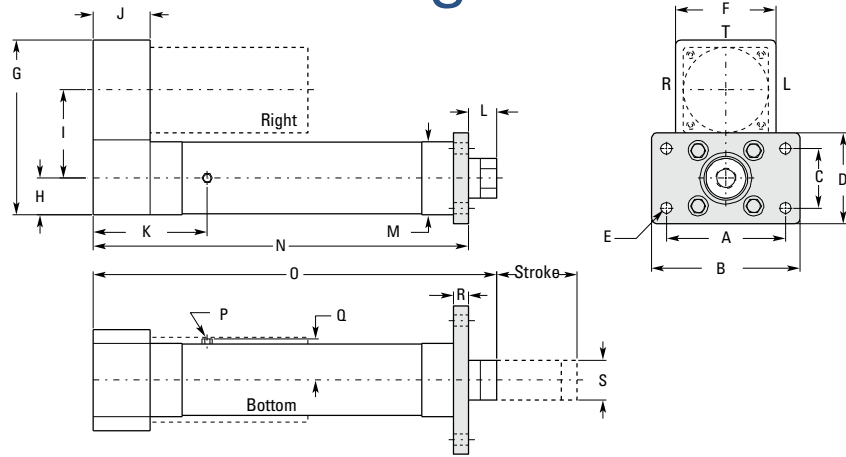


EC Series Outline Drawings

MF1 Front Flange Parallel

Flange dimensions in accordance with ISO 6431 for:	
Type	Bore Size
EC1	30 mm
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



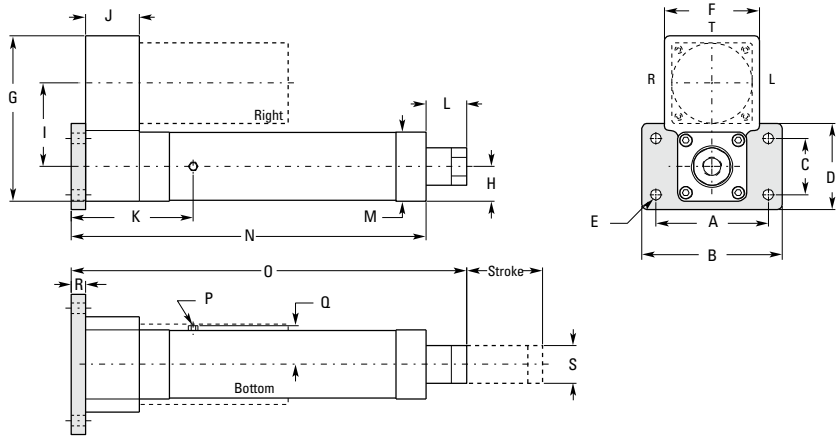
	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)	I mm (in)	J mm (in)	K mm (in)
EC1	60.0 (2.36)	74.0 (2.91)	28.0 (1.10)	40.0 (1.57)	6.60 (0.26)	48.0 (1.89)	82.6 (3.25)	19.0 (0.75)	41.8 (1.65)	31.3 (1.23)	-
EC2	90.0 (3.54)	114.3 (4.50)	45.0 (1.77)	63.5 (2.50)	9.0 (0.35)	79.8 (3.14)	144.0 (5.7)	28.4 (1.12)	74.7 (2.94)	41.7 (1.64)	88.6 (3.49)
EC3	100.0 (3.94)	127.0 (5.00)	50.0 (1.97)	69.1 (2.72)	9.0 (0.35)	95.5 (3.76)	169.7 (6.7)	34.8 (1.37)	*87.6/89.7 (*3.45/3.53)	49.3 (1.94)	94.2 (3.71)
EC4 (-MF1E)	127.0 (5.00)	152.4 (6.00)	69.9 (2.75)	96.3 (3.79)	13.5 (0.53)	127.0 (5.00)	221.0 (8.7)	46.1 (1.81)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)
EC5	150.0 (5.91)	186.9 (7.36)	75.0 (2.95)	114.3 (4.50)	14.2 (0.56)	127.0 (5.00)	221.0 (8.7)	46.1 (1.81)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)

	L mm (in)	M mm (in)	N Cyl Length mm (in)	O Retract length mm (in)	P Breather port Hex		Q mm (in)	R mm (in)	S mm (in)
					type	mm (in)			
EC1	10.2 (0.40)	38.1 (1.50)	113.8 + S (4.48 + S)	124.0 + S (4.88 + S)	-	-	-	10.0 (0.39)	22.2 (0.88)
EC2	25.0 (0.98)	56.9 (2.24)	218.5 + S (8.6 + S)	243.4 + S (9.58 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	9.5 (0.37)	28.0 (1.10)
EC3	25.0 (0.98)	69.6 (2.74)	246.3 + S (9.7 + S)	271.1 + S (10.67 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	12.7 (0.50)	35.0 (1.38)
EC4 (-MF1E)	41.4 (1.63)	92.2 (3.63)	365.8 + S (14.4 + S)	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	12.7 (0.50)	50.0 (1.97)
EC5	35.0 (1.38)	92.2 (3.63)	365.8 + S (14.4 + S)	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	19.1 (0.75)	50.0 (1.97)

* AKM23 / AKM42 dimension

MF2 Rear Flange Parallel

Flange dimensions in accordance with ISO 6431 for:	
Type	Bore Size
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



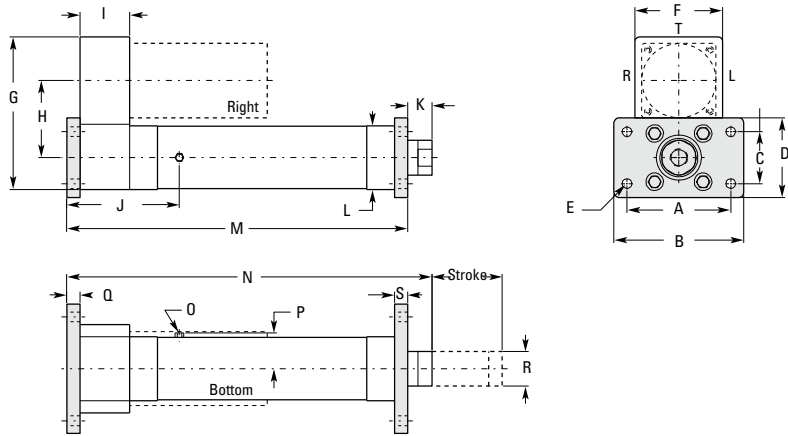
	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)	I mm (in)	J mm (in)	K mm (in)
EC2	90.0 (3.54)	114.3 (4.50)	45.0 (1.77)	63.5 (2.50)	9.0 (0.35)	79.8 (3.14)	147.3 (5.80)	28.45 (1.12)	74.7 (2.94)	41.7 (1.64)	98.3 (3.87)
EC3	100.0 (3.94)	127.0 (5.00)	50.0 (1.97)	69.1 (2.72)	9.0 (0.35)	95.5 (3.76)	169.7 (6.68)	34.8 (1.37)	*87.6/89.7 (*3.45/3.53)	49.3 (1.94)	106.9 (4.21)
EC4 (-MF1E)	127.0 (5.00)	152.4 (6.00)	69.9 (2.75)	96.3 (3.79)	13.5 (0.53)	127.0 (5.00)	221.0 (8.70)	46.1 (1.81)	111.1 (4.37)	71.9 (2.83)	163.5 (6.44)
EC5	150.0 (5.91)	186.9 (7.36)	75.0 (2.95)	114.3 (4.50)	14.2 (0.56)	127.0 (5.00)	221.0 (8.70)	46.1 (1.81)	111.1 (4.37)	71.9 (2.83)	169.9 (6.69)

	L mm (in)	M mm (in)	N Cyl Length mm (in)	O Retract length mm (in)	P Breather port Hex		Q mm (in)	R mm (in)	S mm (in)
					type	mm (in)			
EC2	34.5 (1.36)	56.9 (2.24)	218.5 + S (8.6 + S)	253.0 + S (9.96 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	9.5 (0.37)	28.0 (1.10)
EC3	37.7 (1.48)	69.6 (2.74)	246.3 + S (9.7 + S)	284.3 + S (11.19 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	12.7 (0.50)	35.0 (1.38)
EC4 (-MF1E)	54.1 (2.13)	92.2 (3.63)	365.8 + S (14.4 + S)	419.6 + S (16.52 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	12.7 (0.50)	50.0 (1.97)
EC5	54.1 (2.13)	92.2 (3.63)	365.8 + S (14.4 + S)	419.6 + S (16.52 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	19.1 (0.75)	50.0 (1.97)

* AKM23 / AKM42 dimension

MF3 Front and Rear Flanges Parallel

Flange dimensions in accordance with ISO 6431 for:	
Type	Bore Size
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



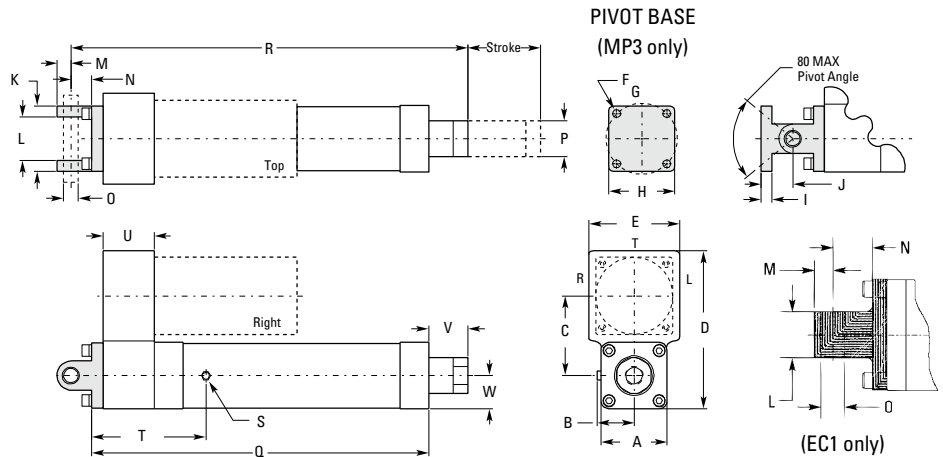
	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)	I mm (in)	J mm (in)	K mm (in)
EC2	90.0 (3.54)	114.3 (4.50)	45.0 (1.77)	63.5 (2.50)	9.0 (0.35)	79.8 (3.14)	147.3 (5.80)	74.7 (2.94)	41.7 (1.64)	98.3 (3.87)	25.0 (0.98)
EC3	100.0 (3.94)	127.0 (5.00)	50.0 (1.97)	69.1 (2.72)	9.0 (0.35)	95.5 (3.76)	169.7 (6.68)	*87.6/89.7 (*3.45/3.53)	49.3 (1.94)	106.9 (4.21)	25.0 (0.98)
EC4 (-MF3E)	127.0 (5.00)	152.4 (6.00)	69.9 (2.75)	96.3 (3.79)	13.5 (0.53)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	163.5 (6.44)	41.4 (1.63)
EC5	150.0 (5.91)	186.9 (7.36)	75.0 (2.95)	114.3 (4.50)	14.2 (0.56)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	169.9 (6.69)	35.1 (1.38)

	L mm (in)	M Cyl Length mm (in)	N Retract length mm (in)	O Breather port Hex		P mm (in)	Q mm (in)	R mm (in)	S mm (in)
				type	mm (in)				
EC2	56.9 (2.24)	228.1 + S (8.98 + S)	253.0 + S (9.96 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	9.5 (0.37)	28.0 (1.10)	9.5 (0.37)
EC3	69.6 (2.74)	259.3 + S (10.21 + S)	284.3 + S (11.19 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	12.7 (0.50)	35.0 (1.38)	12.7 (0.50)
EC4 (-MF3E)	92.2 (3.63)	387.5 + S (14.9 + S)	419.6 + S (16.52 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	12.7 (0.50)	50.0 (1.97)	12.7 (0.50)
EC5	92.2 (3.63)	378.5 + S (14.9 + S)	419.6 + S (16.52 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	19.1 (0.75)	50.0 (1.97)	19.1 (0.75)

* AKM23 / AKM42 dimension

MP3 Clevis Mount with Pivot Base and Pin Parallel

Flange dimensions in accordance with ISO 6431 for:	
Type	Bore Size
EC1	30 mm
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)	I mm (in)	J mm (in)	K mm (in)	L mm (in)	M mm (in)
EC1	43.7 (1.72)	-	418 (1.65)	82.6 (3.25)	48.0 (1.89)	5.5 (0.22)	48.0 (1.89)	46.0 (1.81)	8.0 (0.31)	30.0 (1.18)	-	19.9/20.1 (0.782/0.792)	8.0 (0.31)
EC2	56.9 (2.24)	34.8 (1.37)	74.7 (2.94)	144.0 (5.67)	79.8 (3.14)	5.4 (0.21)	61.7 (2.43)	56.9 (2.24)	9.5 (0.37)	25.4 (1.00)	57.0 (2.24)	32.0/32.6 (1.26/1.28)	12.7 (0.50)
EC3	69.6 (2.74)	41.1 (1.62)	87.6/89.7* (3.45/3.53*)	169.7 (6.68)	95.5 (3.76)	6.5 (0.26)	76.0 (2.99)	69.3 (2.73)	9.5 (0.37)	31.5 (1.24)	69.3 (2.73)	40.0/40.6 (1.58/1.60)	15.2 (0.60)
EC4	92.2 (3.63)	52.8 (2.08)	111.1 (4.37)	221.0 (8.70)	127.0 (5.00)	11.1 (0.44)	98.8 (3.89)	91.4 (3.60)	15.7 (0.62)	44.4 (1.75)	91.4 (3.60)	60.0/60.5 (2.36/2.38)	19.6 (0.77)
EC5	92.2 (3.63)	52.8 (2.08)	111.1 (4.37)	221.0 (8.70)	127.0 (5.00)	11.1 (0.44)	98.8 (3.89)	91.4 (3.60)	15.7 (0.62)	44.4 (1.75)	91.4 (3.60)	60.0/60.5 (2.36/2.38)	19.6 (0.77)

	N mm (in)	O mm (in)	P mm (in)	Q Cyl Length mm (in)	R Retract length mm (in)	S Breather port Hex		T mm (in)	U mm (in)	V mm (in)	W mm (in)
						type	mm (in)				
EC1	17.2 (0.68)	9.86/10.1 (0.388/0.398)	22.2 (0.88)	109.9 + S (4.33 + S)	147.5 + S (5.81 + S)	-	-	-	31.3 (1.23)	20.2 (0.80)	19.1 (0.75)
EC2	15.7 (0.62)	11.9/12.0 (0.470/0.472)	28.0 (1.10)	218.5 + S (8.6 + S)	267.5 + S (10.5)	1/8 NPT	11.1 (0.44)	98.3 (3.87)	41.7 (1.64)	34.5 (1.36)	28.5 (1.12)
EC3	21.8 (0.86)	15.9/16.0 (0.628/0.630)	35.0 (1.38)	242.7 + S (9.55 + S)	302.6 + S (11.91 + S)	1/8 NPT	11.1 (0.44)	103.9 (4.09)	49.3 (1.94)	37.7 (1.48)	34.8 (1.37)
EC4	28.7 (1.13)	19.9/20.0 (0.785/0.787)	50.0 (1.97)	368.3 + S (14.5 + S)	451.4 + S (17.77 + S)	1/4 NPT	14.0 (0.55)	166.6 (6.56)	71.9 (2.83)	54 (2.13)	46.1 (1.81)
EC5	28.7 (1.13)	19.9/20.0 (0.785/0.787)	50.0 (1.97)	368.3 + S (14.5 + S)	451.4 + S (17.77 + S)	1/4 NPT	14.0 (0.55)	166.6 (6.56)	71.9 (2.83)	54 (2.13)	46.1 (1.81)

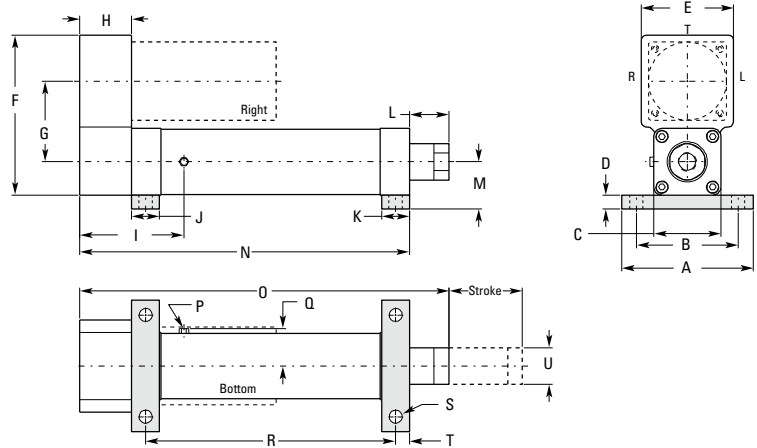
* AKM23 / AKM42 dimension

EC Series Outline Drawings

MS2 Side Lugs Parallel

Flange dimensions in accordance with ISO 6431 for:

Type	Bore Size
EC1	30 mm
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)	I mm (in)	J mm (in)	K mm (in)
EC1	78.0 (3.07)	62.0 (2.44)	43.7 (1.72)	8.0 (0.31)	48.0 (1.89)	82.6 (3.25)	41.8 (1.65)	31.3 (1.23)	-	20.0 (0.79)	20.0 (0.79)
EC2	114.3 (4.50)	85.0 (3.35)	56.9 (2.24)	9.5 (0.37)	79.8 (3.14)	144.0 (5.67)	74.7 (2.94)	41.7 (1.64)	88.6 (3.49)	22.1 (0.87)	22.1 (0.87)
EC3	127.0 (5.00)	100.0 (3.94)	69.6 (2.74)	12.7 (0.50)	95.5 (3.76)	169.7 (6.68)	87.6/89.7 * (3.45/3.53 *)	49.3 (1.94)	94.2 (3.71)	25.0 (0.98)	25.0 (0.98)
EC4	181.1 (7.13)	140.0 (5.51)	92.2 (3.63)	19.1 (0.75)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)	38.1 (1.50)	38.1 (1.50)
EC5	181.1 (7.13)	140.0 (5.51)	92.2 (3.63)	19.1 (0.75)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)	38.1 (1.50)	38.1 (1.50)

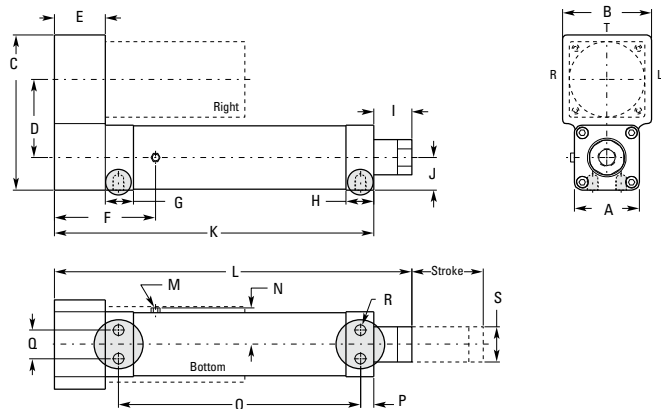
	L mm (in)	M mm (in)	N Cyl Length mm (in)	O Retract length mm (in)	P Breather port Hex		Q mm (in)	R mm (in)	S mm (in)	T mm (in)	U mm (in)
					type	mm (in)					
EC1	20.5 (0.81)	27.1 (1.06)	103.5 + S (4.07 + S)	124.0 + S (4.88 + S)	-	-	-	65.6 + S (2.58 + S)	6.6 (0.26)	10.0 (0.39)	22.2 (0.88)
EC2	34.5 (1.36)	38.1 (1.50)	208.8 + S (8.22 + S)	243.4 + S (9.58 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	144.8 + S (5.7 + S)	9.0 (0.35)	11.0 (0.43)	28.0 (1.10)
EC3	37.7 (1.48)	47.5 (1.87)	233.4 + S (9.19 + S)	271.1 + S (10.67 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	158.8 + S (6.25 + S)	11.0 (0.43)	12.5 (0.49)	35.0 (1.38)
EC4	54.0 (2.13)	65.3 (2.57)	353.1 + S (13.9 + S)	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	242.6 + S (9.55 + S)	18.0 (0.71)	19.1 (0.75)	50.0 (1.97)
EC5	54.0 (2.13)	65.3 (2.57)	353.1 + S (13.9 + S)	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	242.6 + S (9.55 + S)	18.0 (0.71)	19.1 (0.75)	50.0 (1.97)

* AKM23 / AKM42 dimension

MS6 Side Tapped Holes Parallel

Flange dimensions in accordance with ISO 6431 for:

Type	Bore Size
EC1	30 mm
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



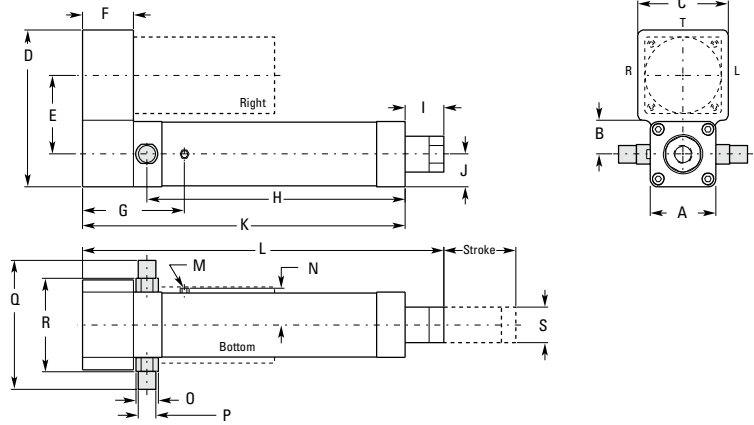
	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)	I mm (in)	J mm (in)	K Cyl Length mm (in)
EC1	43.7 (1.72)	48.0 (1.89)	82.6 (3.25)	41.8 (1.65)	31.3 (1.23)	-	10.5 (0.41)	19.2 (0.76)	20.2 (0.80)	19.1 (0.75)	103.5 + S (4.07 + S)
EC2	56.9 (2.24)	79.8 (3.14)	144.0 (5.67)	74.7 (2.94)	41.7 (1.64)	88.6 (3.49)	22.1 (0.87)	22.1 (0.87)	34.5 (1.36)	28.5 (1.12)	208.8 + S (8.22 + S)
EC3	69.6 (2.74)	95.5 (3.76)	169.7 (6.68)	87.6/89.7 * (3.45/3.53 *)	49.3 (1.94)	94.2 (3.71)	25.1 (0.99)	25.1 (0.99)	37.7 (1.48)	34.8 (1.37)	233.4 + S (9.19 + S)
EC4	92.2 (3.63)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)	40.0 (1.57)	40.0 (1.57)	54.0 (2.13)	46.1 (1.81)	353.1 + S (13.9 + S)
EC5	92.2 (3.63)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)	40.0 (1.57)	40.0 (1.57)	54.0 (2.13)	46.1 (1.81)	353.1 + S (13.9 + S)

	L Retract length mm (in)	M Breather port Hex		N mm (in)	O Mounting Length mm (in)	P mm (in)	Q mm (in)	R (MS6E) Thread	R (MS6M) Thread	S mm (in)
		type	mm (in)							
EC1	124.0 + S (4.88 + S)	-	-	-	65.7 + S (2.59 + S)	9.94 (0.39)	16.0 (0.63)	-	M6 x 1-6H x 6.8 mm Dp	22.2 (0.88)
EC2	243.4 + S (9.58 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	144.8 + S (5.7 + S)	11.0 (0.43)	25.0 (0.98)	5/16-18 UNC-2B x 0.33 Dp	M8 x 1.25-6H x 8.4 mm Dp	28.0 (1.10)
EC3	271.1 + S (10.67 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	158.8 + S (6.25 + S)	12.5 (0.49)	30.0 (1.18)	3/8-16 UNC-2B x 0.40 Dp	M10 x 1.50-6H x 10.2 mm Dp	35.0 (1.38)
EC4	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	242.6 + S (9.55 + S)	19.1 (0.75)	40.6 (1.60)	5/8-18 UNF-2B x 0.55 Dp	M16 x 2-6H x 14 mm Dp	50.0 (1.97)
EC5	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	242.6 + S (9.55 + S)	19.1 (0.75)	40.6 (1.60)	5/8-18 UNF-2B x 0.55 Dp	M16 x 2-6H x 14 mm Dp	50.0 (1.97)

* AKM23 / AKM42 dimension

MT4 Trunnion Parallel

Flange dimensions in accordance with ISO 6431 for:	
Type	Bore Size
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



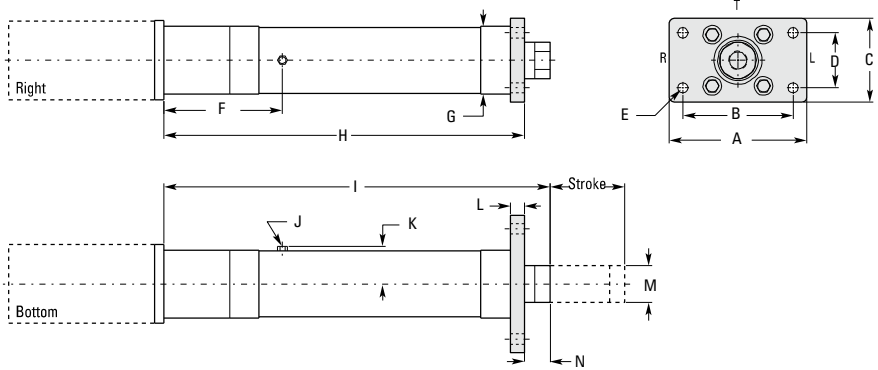
	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H Mounting Length mm (in)	I mm (in)	J mm (in)
EC2	56.9 (2.24)	28.5 (1.12)	79.8 (3.14)	144.0 (5.67)	74.7 (2.94)	41.7 (1.64)	88.6 (3.49)	155.8 + S (6.13 + S)	34.5 (1.36)	28.5 (1.12)
EC3	69.6 (2.74)	38.6 (1.52)	95.5 (3.76)	169.7 (6.68)	87.6/89.7* (3.45/3.53 *)	49.3 (1.94)	94.2 (3.71)	171.2 + S (6.74 + S)	37.7 (1.48)	34.8 (1.37)
EC4	92.2 (3.63)	48.0 (5.94)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)	261.6 + S (10.30 + S)	54.0 (2.13)	46.1 (1.81)
EC5	92.2 (3.63)	48.0 (1.89)	127.0 (5.00)	221.0 (8.70)	111.1 (4.37)	71.9 (2.83)	150.9 (5.94)	261.6 + S (10.30 + S)	54.0 (2.13)	46.1 (1.81)

	K Cyl Length mm (in)	L Retract length mm (in)	M Breather port Hex		N mm (in)	O mm (in)	P mm (in)	Q mm (in)	R mm (in)	S mm (in)
			type	mm (in)						
EC2	208.8 + S (8.22 + S)	243.4 + S (9.58 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	19.1 (0.75)	15.9/16.0 (0.627/0.629)	106.9 (4.21)	75.0 (2.95)	28.0 (1.10)
EC3	233.4 + S (9.19 + S)	271.1 + S (10.67 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	25.0 (0.98)	19.9/20.0 (0.784/0.786)	129.6 (5.10)	90.0 (3.54)	35.0 (1.38)
EC4	353.1 + S (13.9 + S)	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	31.8 (1.60)	24.9/25.0 (0.981/0.983)	181.6 (7.15)	131.8 (5.19)	50.0 (1.97)
EC5	353.1 + S (13.9 + S)	406.9 + S (16.02 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	31.8 (1.25)	24.9/25.0 (0.981/0.983)	181.6 (7.15)	131.8 (5.19)	50.0 (1.97)

* AKM23 / AKM42 dimension

MT1 Front Flange Inline

Flange dimensions in accordance with ISO 6431 for:	
Type	Bore Size
EC1	30 mm
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H Cyl Length mm (in)
EC1	74.0 (2.91)	60.0 (2.36)	40.0 (1.57)	28.0 (1.10)	6.6 (0.26)	-	38.1 (1.50)	111.7 + S (4.40 + S)
EC2	114.3 (4.50)	90.0 (3.54)	63.5 (2.50)	45.0 (1.77)	9.0 (0.35)	100.7 (3.96)	56.9 (2.24)	230.5 + S (9.08 + S)
EC3	127.0 (5.00)	100.0 (3.94)	69.1 (2.72)	50.0 (1.97)	9.0 (0.35)	121.3 (4.78)	69.6 (2.74)	273.4 + S (10.76 + S)
EC4	152.4 (6.00)	127.0 (5.00)	96.3 (3.79)	69.85 (2.75)	13.5 (0.53)	169.2 (6.66)	92.2 (3.63)	390.3 + S (15.37 + S)
EC5	186.9 (7.36)	155.0 (6.10)	114.3 (4.50)	75.0 (2.95)	14.2 (0.56)	169.2 (6.66)	92.2 (3.63)	390.3 + S (15.37 + S)

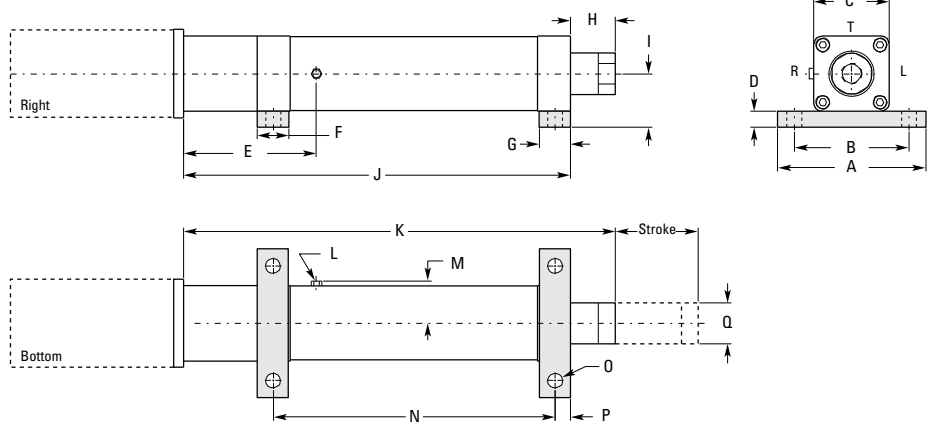
	I Retract length mm (in)	J Breather port Hex		K mm (in)	L mm (in)	M mm (in)	N mm (in)
		type	mm (in)				
EC1	122.1 + S (4.81 + S)	-	-	-	10.0 (0.39)	22.2 (0.88)	10.2 (0.40)
EC2	255.5 + S (10.06 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	9.5 (0.37)	28.0 (1.10)	25.0 (0.98)
EC3	298.3 + S (11.74 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	12.7 (0.50)	35.0 (1.38)	25.0 (0.98)
EC4	425.3 + S (16.74 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	12.7 (1.60)	50.0 (1.97)	41.1 (1.60)
EC5	425.3 + S (16.74 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	19.1 (0.75)	50.0 (1.97)	35.0 (1.38)

EC Series Outline Drawings

MS2 SideLugs Inline

Flange dimensions in accordance with ISO 6431 for:

Type	Bore Size
EC1	30 mm
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



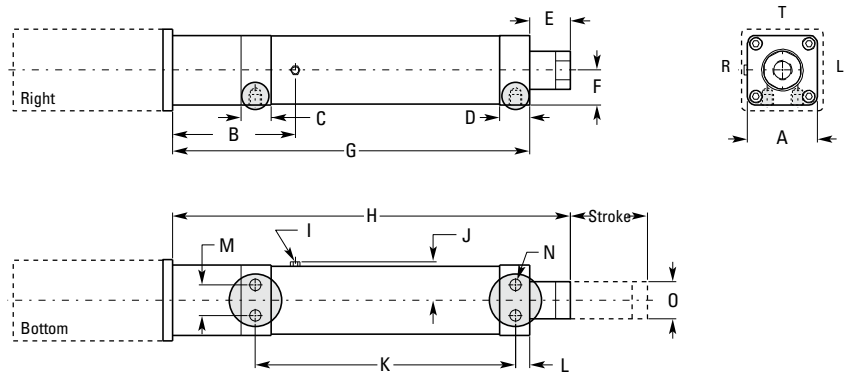
	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H mm (in)	I mm (in)	J Cyl Length mm (in)
EC1	78.0 (3.07)	62.0 (2.44)	43.7 (1.72)	8.0 (0.31)	-	20.0 (0.79)	20.0 (0.79)	20.5 (0.81)	27.1 (1.06)	101.7 + S (4.00 + S)
EC2	114.3 (4.50)	85.0 (3.35)	56.9 (2.24)	9.5 (0.37)	100.7 (3.96)	22.1 (0.87)	22.1 (0.87)	34.5 (1.36)	38.1 (1.50)	220.9 + S (8.70 + S)
EC3	127.0 (5.00)	100.0 (3.94)	69.6 (2.74)	12.7 (0.50)	121.3 (4.78)	25.0 (0.98)	25.0 (0.98)	37.7 (1.48)	47.5 (1.87)	260.5 + S (10.25 + S)
EC4	181.1 (7.13)	140.0 (5.51)	92.2 (3.63)	19.1 (0.75)	169.2 (6.66)	38.1 (1.50)	38.1 (1.50)	54.0 (2.13)	65.3 (2.57)	371.3 + S (14.62 + S)
EC5	181.1 (7.13)	140.0 (5.51)	92.2 (3.63)	19.1 (0.75)	169.2 (6.66)	38.1 (1.50)	38.1 (1.50)	54.0 (2.13)	65.3 (2.57)	371.3 + S (14.62 + S)

	K Retract length mm (in)	L Breather port Hex		M mm (in)	N mm (in)	O mm (in)	P mm (in)	Q mm (in)
		type	mm (in)					
EC1	122.1 + S (4.81 + S)	-	-	-	65.8 + S (2.59 + S)	6.6 (0.26)	10.0 (0.39)	22.2 (0.88)
EC2	255.5 + S (10.06 + S)	1/8 NPT	11.1 (0.44)	34.8 (1.37)	144.8 + S (5.7 + S)	9.0 (0.35)	11.0 (0.43)	28.0 (1.10)
EC3	298.1 + S (11.74 + S)	1/8 NPT	11.1 (0.44)	41.1 (1.62)	158.8 + S (6.25 + S)	11.0 (0.43)	12.5 (0.49)	35.0 (1.38)
EC4	425.3 + S (16.74 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	242.6 + S (9.55 + S)	18.0 (0.71)	19.1 (0.75)	50.0 (1.97)
EC5	425.3 + S (16.74 + S)	1/4 NPT	14.0 (0.55)	52.8 (2.08)	242.6 + S (9.55 + S)	18.0 (0.71)	19.1 (0.75)	50.0 (1.97)

MS6 Side Tapped Holes Inline

Flange dimensions in accordance with ISO 6431 for:

Type	Bore Size
EC1	30 mm
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm

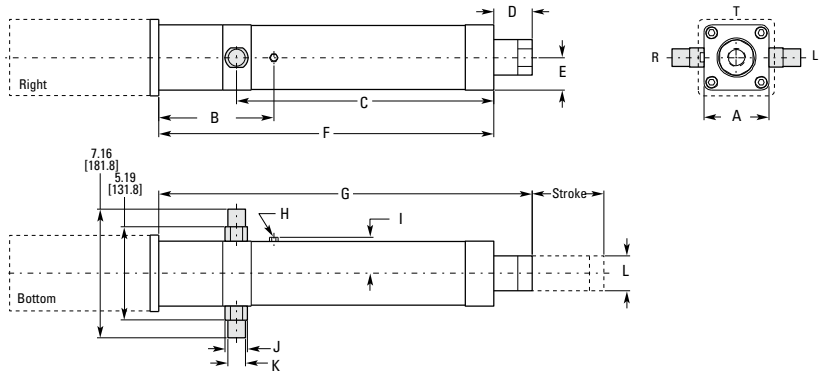


	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G Cyl Length mm (in)	H Retract length mm (in)	I Breather port Hex	
									type	mm (in)
EC1	43.7 (1.72)	-	-	19.2 (0.76)	20.5 (0.81)	19.1 (0.75)	101.7 + S (4.00 + S)	122.1 + S (4.81 + S)	-	-
EC2	56.9 (2.24)	100.7 (3.96)	22.1 (0.87)	22.1 (0.87)	34.5 (1.36)	28.5 (1.12)	220.9 + S (8.70 + S)	255.5 + S (10.06 + S)	1/8 NPT	11.1 (0.44)
EC3	69.6 (2.74)	121.3 (4.78)	25.1 (0.99)	25.1 (0.99)	37.7 (1.48)	34.8 (1.37)	260.5 + S (10.25 + S)	298.1 + S (11.74 + S)	1/8 NPT	11.1 (0.44)
EC4	92.2 (3.63)	169.2 (5.94)	40.0 (1.57)	40.0 (1.57)	54.0 (2.13)	46.1 (1.81)	371.3 + S (14.62 + S)	425.3 + S (16.74 + S)	1/4 NPT	14.0 (0.55)
EC5	92.2 (3.63)	169.2 (6.66)	40.0 (1.57)	40.0 (1.57)	54.0 (2.13)	46.1 (1.81)	371.3 + S (14.62 + S)	425.3 + S (16.74 + S)	1/4 NPT	14.0 (0.55)

	J mm (in)	K mm (in)	L mm (in)	M mm (in)	N (MS6E) mm (in)	N (MS6M) mm (in)	O mm (in)
EC2	34.8 (1.37)	144.8 + S (5.7 + S)	11.0 (0.43)	25.0 (0.98)	5/16-18 UNC-2B x 0.33 Dp	M8 x 1.25-6H x 8.4 mm Dp	28.0 (1.10)
EC3	41.1 (1.62)	158.8 + S (6.25 + S)	12.5 (0.49)	30.0 (1.18)	3/8-16 UNC-2B x 0.40 Dp	M10 x 1.50-6H x 10.2 mm Dp	35.0 (1.38)
EC4	52.8 (2.08)	242.6 + S (9.55 + S)	19.1 (0.75)	40.6 (1.60)	5/8-18 UNF-2B x 0.55 Dp	M16 x 2-6H x 14 mm Dp	50.0 (1.97)
EC5	52.8 (2.08)	242.6 + S (9.55 + S)	19.1 (0.75)	40.6 (1.60)	5/8-18 UNF-2B x 0.55 Dp	M16 x 2-6H x 14 mm Dp	50.0 (1.97)

MT4 Trunnion Mounting Inline

Flange dimensions in accordance with ISO 6431 for:	
Type	Bore Size
EC2	50 mm
EC3	63 mm
EC4	80 mm
EC5	100 mm



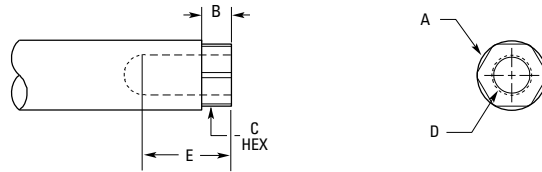
	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F Cyl Length mm (in)	G Retract length mm (in)
EC2	56.9 (2.24)	100.7 (3.96)	155.8 + S (6.13 + S)	34.5 (1.36)	28.5 (1.12)	220.9 + S (8.70 + S)	255.5 + S (10.06 + S)
EC3	69.6 (2.74)	121.3 (4.78)	171.2 + S (6.74 + S)	37.7 (1.48)	34.8 (1.37)	260.5 + S (10.25 + S)	298.1 + S (11.74 + S)
EC4	92.2 (3.63)	169.2 (5.94)	261.6 + S (10.30 + S)	54.0 (2.13)	46.1 (1.81)	371.3 + S (14.62 + S)	425.3 + S (16.74 + S)
EC5	92.2 (3.63)	169.2 (6.66)	261.6 + S (10.30 + S)	54.0 (2.13)	46.1 (1.81)	371.3 + S (14.62 + S)	425.3 + S (16.74 + S)

	H Breather port Hex		I mm (in)	J mm (in)	K mm (in)	L mm (in)	M mm (in)	N mm (in)
	type	mm (in)						
EC2	1/8 NPT	11.1 (0.44)	34.8 (1.37)	19.1 (0.75)	15.9/16.0 (0.627/0.629)	28.0 (1.10)	106.9 (4.21)	75.0 (2.95)
EC3	1/8 NPT	11.1 (0.44)	41.1 (1.62)	25.0 (0.98)	19.9/20.0 (0.784/0.786)	35.0 (1.38)	129.6 (5.10)	90.0 (3.54)
EC4	1/4 NPT	14.0 (0.55)	52.8 (2.08)	31.8 (1.60)	24.9/25.0 (0.981/0.983)	50.0 (1.97)	181.6 (1.60)	131.8 (5.19)
EC5	1/4 NPT	14.0 (0.55)	52.8 (2.08)	31.8 (1.25)	24.9/25.0 (0.981/0.983)	50.0 (1.97)	181.6 (7.15)	131.8 (5.19)

EC Series Outline Drawings

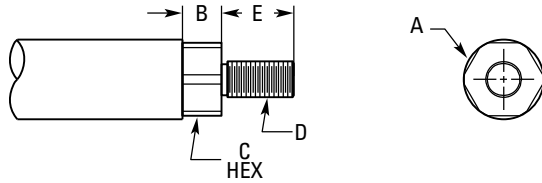
EC Series Rod End Dimensions

FT1 Female Threads Dimensions in [mm]



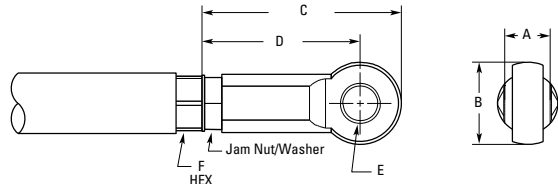
	A mm (in)	B mm (in)	C mm (in)	D		E mm (in)
				FT1M	FT1 [FT1E]	
EC1	20.8 (0.80)	7.6 (0.30)	19.0 (0.70)	M10 x 1.25 mm	-	17.0 (0.70)
EC2	27.8 (1.09)	12.0 (0.47)	25.4 (1.0)	M16 x 2.0 mm	5/8-18 UNF	19.0 (0.75)
EC3	34.9 (1.375)	17.2 (0.68)	31.8 (1.25)	M16 x 2.0 mm	5/8-18 UNF	25.4 (1.00)
EC4	50.0 (1.97)	20.0 (0.79)	47.6 (1.875)	M20 x 1.5 mm	1-14 UNS	31.0 (1.22)
EC5	50.0 (1.97)	20.0 (0.79)	47.6 (1.875)	M24 x 2.0 mm	1-12 UNF	31.0 (1.22)

MT1 Male Threads Dimensions in [mm]



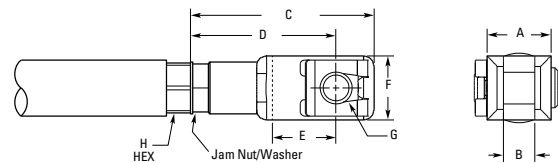
	A mm (in)	B mm (in)	C mm (in)	D		E mm (in)
				MT1M	MT1 [MT1E]	
EC1	20.8 (0.80)	7.6 (0.30)	19 (0.70)	M10 x 1.25 mm	-	27.0 (1.06)
EC2	27.8 (1.09)	12.0 (0.47)	25.4 (1.00)	M16 x 2.0 mm	5/8-18 UNF	32.0 (1.26)
EC3	34.9 (1.375)	17.2 (0.68)	31.8 (1.25)	M16 x 2.0 mm	5/8-18 UNF	32.0 (1.26)
EC4	50.0 (1.97)	20.0 (0.79)	47.6 (1.875)	M20 x 1.5 mm	3/4-16 UNF	40.0 (1.57)
EC5	50.0 (1.97)	20.0 (0.79)	47.6 (1.875)	M24 x 2.0 mm	1-12 UNF	40.0 (1.57)

FS2 Spherical Joint Dimensions in [mm]



	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F HEX mm (in)
EC2	21.0 (0.83)	38.0 (1.50)	92.2 (3.63)	73.2 (2.88)	16.0/16.1 (0.629/0.633)	25.4 (1.00)
EC3	21.0 (0.83)	38.0 (1.50)	92.2 (3.63)	73.2 (2.88)	16.0/16.1 (0.629/0.633)	31.8 (1.25)
EC4	25.0 (0.98)	46.0 (1.81)	111.0 (4.37)	88.0 (3.46)	20.0/20.1 (0.787/0.790)	47.6 (1.875)
EC5	31.0 (1.22)	60.0 (2.36)	138.5 (5.45)	108.5 (4.27)	24.9/25.0 (0.979/0.984)	47.6 (1.875)

FC2 Clevis with Pin Dimensions in [mm]



	A mm (in)	B mm (in)	C mm (in)	D mm (in)	E mm (in)	F mm (in)	G mm (in)	H HEX mm (in)
EC2	32.0 (1.26)	16.0 (0.63)	92.2 (3.63)	73.2 (2.88)	32.0 (1.26)	32.0 (1.26)	15.9/16.0 (0.625/0.630)	25.4 (1.00)
EC3	32.0 (1.26)	16.0 (0.63)	92.2 (3.63)	73.2 (2.88)	32.0 (1.26)	32.0 (1.26)	15.9/16.0 (0.625/0.630)	31.8 (1.25)
EC4	40.0 (1.57)	20.0 (0.79)	116.0 (4.57)	91.0 (3.58)	40.0 (1.57)	40.0 (1.57)	19.9/20.0 (0.782/0.787)	47.6 (1.875)
EC5	50.0 (1.97)	25.0 (0.98)	145.5 (5.73)	113.5 (4.47)	50.0 (1.97)	50.0 (1.97)	24.9/25.0 (0.979/0.984)	47.6 (1.875)