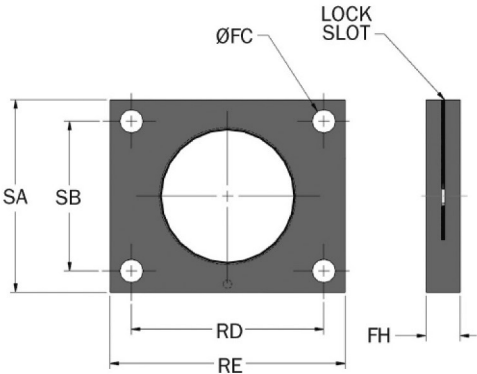


TK, STH Micro-Bore Series

TK 10 → STH 1.5M x 2 Series

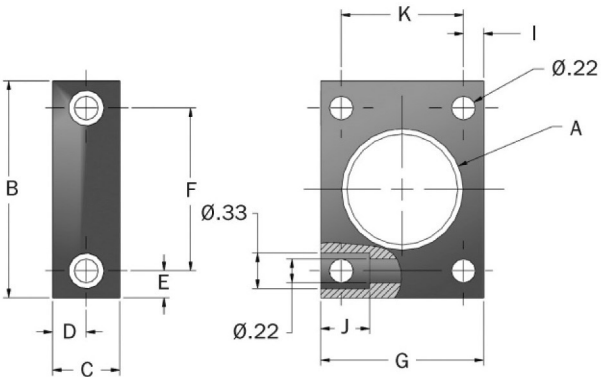
Accessories

Rectangular Flange (RF)



Catalog No. / Model	Part Number	Model (Ref)	A in. (mm)	FC in. (mm)	FH in. (mm)	RD in. (mm)	RE in. (mm)	SA in. (mm)	SB in. (mm)	Bolt Size in. (mm)	Wt. (mass) oz.(g)
RF M45 x 1.5	M58637053	STH 1.5 Series	M45 x 1.5	.34 (8,6)	.50 (12,7)	2.38 (60,5)	3.00 (76,2)	2.25 (57,2)	1.63 (41,3)	5/16 (M8)	9 (142)

Universal Retaining Flange (UF)



Catalog No. / Model	Part Number	Model (Ref)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)	F in. (mm)	G in. (mm)	H in. (mm)	J in. (mm)
UF M10 x 1	U16363189	TK 10M(B)/TK21M	M10 x 1	1.50 (38,0)	.47 (12,0)	.24 (6,0)	.25 (6,25)	1.00 (25,5)	1.00 (25)	.50 (12,5)	.20 (5)
UF 3/8 - 32	U19070095	TK21	3/8 - 32 UNF	1.50	0.56	0.28	0.25	1.00	1.00	0.50	0.20

ECO Series Shock Absorbers

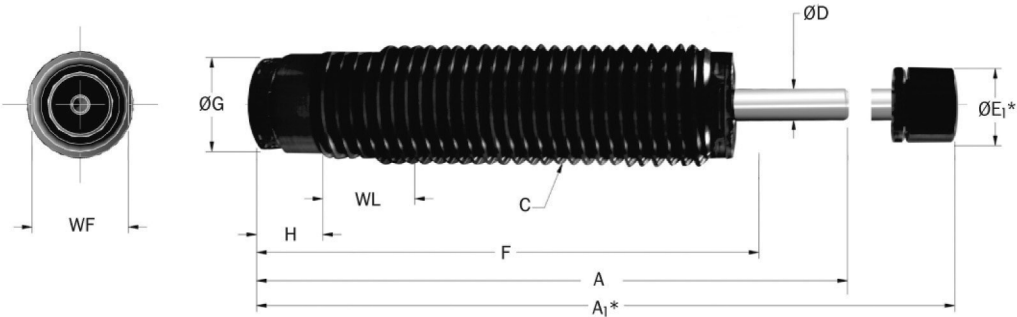


ECO Series 특징점

- Anodize표면처리
- 친환경적인 원자재 (Enicote II 표면마감)
- ROHS인증제품
- 친환경적인 오일사용
- 구리를 사용하지 않음
- 300시간 염분 테스트 통과
- 몸체가 알루미늄 재질로 전체적인 무게가 35% 감소

ECO 8 → ECO 100 Series

Custom Orificed Products



Technical Data

Catalog No./ Model	(S) Stroke in. (mm)	(E _T) Max. in.-lbs./cycle (Nm/cycle)	(E _T E) Emergen cy Max. in.-lbs./cycle (Nm/cycle)	(E _T C) Max. in.-lbs./hour (Nm/h)	(F _P) Max.Reaction Force lbs. (N)	Nominal Coil Spring Force		(F _D) Max. Propelling Force lbs. (N)	Model Weight oz. (g)
						Extended lbs. (N)	Compressed lbs.(N)		
ECO 8 (B)	0.25 (6,4)	35 (4,0)	- (-)	55,000 (6 215)	200 (890)	0.6 (2,7)	1.2 (5,6)	45 (200)	.5 (16)
ECO 10 (B)	0.28 (7,0)	62 (7,0)	- (-)	120,700 (13 640)	360 (1 600)	0.5 (2,2)	1.0 (4,5)	80 (350)	1.0 (28)
ECO 15 (B)	0.41 (10,4)	106 (12,0)	220 (25)	275,000 (31 020)	450 (2 000)	0.7 (3,0)	1.6 (7,0)	50 (220)	2.0 (56)
ECO S 25 (B)	0.50 (12,7)	212 (24,0)	390 (44)	331,000 (37 400)	625 (2 800)	1.0 (4,5)	2.5 (11,0)	200 (890)	2.4 (68)
ECO 25 (B)	0.63 (16,0)	265 (30,0)	500 (56)	389,000 (44 000)	625 (2 800)	1.0 (4,5)	2.5 (11,0)	200 (890)	2.4 (68)
ECO S 50 (B)	0.50 (12,7)	285 (32,0)	560 (63)	440,000 (49 720)	850 (3 750)	1.5 (6,0)	3.5 (15,0)	360 (1 600)	4.0 (123)
ECO 50 (B)	0.88 (22,0)	550 (62,0)	975 (110)	523,000 (59 070)	850 (3 750)	2.0 (8,9)	6.8 (30,0)	360 (1 600)	4.8 (136)
ECO 100 (B)	1.00 (25,0)	930 (105,0)	2210 (250)	681,500 (77 000)	1,250 (5 500)	3.0 (13,0)	6.0 (27,0)	500 (2 200)	10.5 (297)

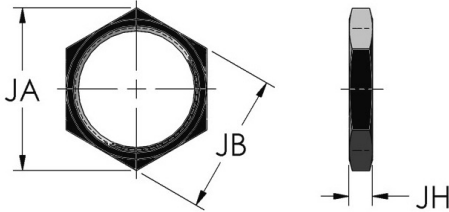
■주의 : E_TE의 수치의 경우 (1~5회 미만) 비상용으로 사용될 경우에만 참고하십시오.

Catalog No./ Model	Damping Constant	A in. (mm)	A ₁ in. (mm)	C in. (mm)	D in. (mm)	E ₁ in. (mm)	F in. (mm)	G in. (mm)	H in. (mm)	J in. (mm)	WF in. (mm)	WL in. (mm)
ECO 8 IF (B)	-1,-2,-3	1.86	2.25	3/8 - 32 UNEF	.10	0.27	1.61	.26	.18	.10	-	-
ECO 8 MF (B)	-1,-2,-3	(47,0)	(57,0)	M8 x 0,75	(2,5)	(6,8)	(40,9)	(6,6)	(4,6)	(2,5)	-	-
ECO 8 MC (B)	-1,-2,-3			M8 x 1,0							-	-
ECO 10 IF (B)	-1,-2,-3	2.12	2.51	7/16 - 28 UNEF	.12	0.34	1.83	.34	.18	.13	-	-
ECO 10 MF (B)	-1,-2,-3	(54,0)	(64,0)	M10 x 1,0	(3,0)	(8,6)	(46,5)	(8,6)	(4,6)	(3,3)	-	-
ECO 15 IF (B)	-1,-2,-3,-4	2.45	2.85	7/16 - 28 UNEF	.12	.40	2.10	.39	.27	.10	.39	.38
ECO 15 MF(B)	-1,-2,-3,-4	(62,2)	(72,4)	M12 x 1,0	(3,0)	(10,2)	(52,1)	(9,9)	(6,9)	(2,5)	(11,0)	(9,5)
ECO 15 IC (B)	-1,-2,-3,-4			1/2 - 20 UNEF								
ECO S 25 MF (B)	-1,-2,-3	3.25	3.63	M14 x 1,0	.16	0.44	2.74	.43	.20	.04	(12,0)	.50
ECO S 25 IC (B)	-1,-2,-3	(82,7)	(92,2)	9/16 - 18 UNF	(4,0)	(11,2)	(69,5)	(10,9)	(5,1)	(1,0)	.50	(12,0)
ECO S 25 MC (B)	-1,-2,-3			M14 x 1,5								
ECO 25 IF (B)	-1,-2,-3,-4	3.84	4.22	1/2 - 20 UNF	.16	.44	3.20	.43	.30	.04	(12,0)	.50
ECO 25 MF (B)	-1,-2,-3,-4	(97,5)	(107,2)	M14 x 1,0	(4,0)	(11,2)	(81,3)	(10,9)	(7,6)	(1,0)	.50	12.7
ECO 25 IC (B)	-1,-2,-3,-4			9/16 - 18 UNF								12.0
ECO 25 MC (B)	-1,-2,-3,-4			M14 x 1,5								
ECO S 50 IF (B)	-1,-2,-3	3.46	3.93	3/4 - 16 UNF	.19	0.50	2.93	.64	.30	.04	.68	.50
ECO S 50 MC (B)	-1,-2,-3	(87,9)	(99,9)	M20 x 1,5	(4,8)	(12,7)	(74,4)	(16,3)	(7,6)	(1,0)	(18,0)	(12,7)
ECO 50 IF (B)	-1,-2,-3,-4	4.66	5.13	3/4 - 16 UNF	.19	0.50	3.76	.64	.30	.04	.68	.50
ECO 50 MC (B)	-1,-2,-3,-4	(118,4)	(130,3)	M20 x 1,5	(4,8)	(12,7)	(95,5)	(16,3)	(7,6)	(1,0)	(18,0)	(12,7)
ECO 100 IF (B)	-1,-2,-3,-4	5.07	5.57	1-12 UNF	.25	0.62	4.04	.87	.50	.18	.88	.50
ECO 100 MF (B)	-1,-2,-3,-4	(128,8)	(141,5)	M25 x 1,5	(6,4)	(15,7)	(102,6)	(22,0)	(12,7)	(4,6)	(23,0)	(12,7)
ECO 100 MC (B)	-1,-2,-3,-4			M27 x 3,0								

■참조 : 그래프는 P53을 참조 하십시오.

ECO 8 → ECO 100 Series

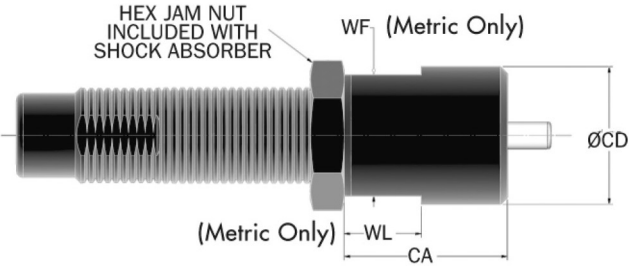
Jam Nut (JN)



Catalog No./ Model	ECO Series Part Number	Model (Ref)	JA in. (mm)	JB in. (mm)	JH in. (mm)	Weight (mass) oz.(g)
JN 3/8 - 32	J123839034	ECO 8 (B)	0.58	0.50	.09	0.1
JN M8 x 0,75	J223839185	ECO 8 MF (B)	(14,0)	(12,0)	(4,0)	(2)
JN M8 x 1	J223839035	ECO 8 MC (B)	(14,0)	(12,0)	(4,0)	(2)
JN 7/16 - 28	J123840034	ECO 10 IF (B)/ECO 15 (B)	0.65	0.56	.16	0.1
JN M10 x 1	J223840167	ECO 10 MF (B)	(17,3)	(15,0)	(4,0)	(2)
JN M12 x 1	J223841035	ECO 15 M (B)	(15,0)	(13,0)	(3,2)	(2)
JN 1/2 - 20	J123842166	ECO 25 IF (B)	0.72	0.63	.12	0.1
JN M14 x 1	J223842035	ECO S/ECO 25 MF (B)	(19,7)	(17,0)	(4,0)	(3)
JN 9/16 - 18	J123842034	ECO S/ECO 25 IC (B)	1.01	0.88	.31	0.6
JN M14 x 1,5	J223842165	ECO S/ECO 25 MC (B)	(19,7)	(17,0)	(4,0)	(3)
JN 3/4 - 16	J123844034	ECO S/ECO 50 IC (B)	1.08	0.94	.18	0.3
JN M20 x 1,5	J223844035	ECO S/ECO 50 MC (B)	(27,7)	(24,0)	(4,6)	(9)
JN 1-12	J123846034	ECO 100 (B)	1.30	1.13	.18	0.5
JN M25 x 1,5	J223846035	ECO 100 MF (B)	(37,0)	(32,0)	(4,6)	(15)

ECO8 → ECO100

Stop Collar (SC)

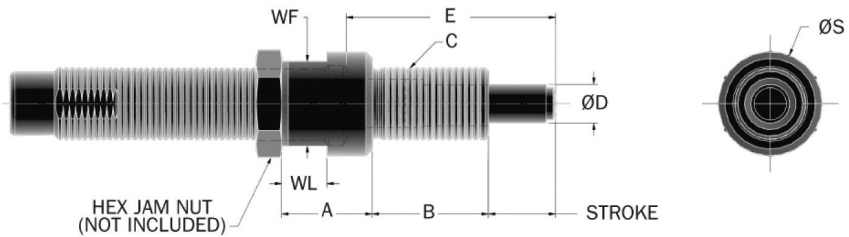


Catalog No./ Model	ECO Series Part Number	Model (Ref)	CA in. (mm)	CB in. (mm)	CD in. (mm)	WF in. (mm)	WL in. (mm)	Weight (mass) oz.(g)
SC 3/8 - 32	M923839057	ECO 8 (B)	0.75	.50	0.58	-	-	.5
SC M8 x 0,75	M923839175	ECO 8 MF (B)	(19,0)	(12,0)	(14,0)	-	-	(23)
SC M8 x 1	M923839058	ECO 8 MC (B)	(19,0)	(12,0)	(14,0)	-	-	(23)
SC 7/16 - 28	M923841057	ECO 10 IF (B)	0.75	-	0.63	-	-	.5
SC M10 x 1	M923840171	ECO 10 MF (B)	(19,0)	-	(14,3)	-	-	(11)
SC 7/16 - 28	M923841057	ECO 15 (B)	0.75	-	0.63	-	-	.5
SC M12 x 1	M923841058	ECO 15 M (B)	(19,0)	-	(16,0)	(14,0)	(9,0)	(14)
SC 1/2 - 20	M923842057	ECO 25 IF (B)	1.00	-	0.75	-	-	1.0
SC M14 x 1,5	M923842171	ECO S/ECO 25 MF (B)	(25,4)	-	(21,0)	(19,0)	(12,0)	(38)
SC 9/16 - 18	M923842199	ECO S/ECO 25 IC (B)	1.00	-	0.69	-	-	1.0
SC M14 x 1	M923842058	ECO S/ECO 25 MF (B)	(25,4)	-	(18,0)	(17,0)	(12,0)	(20)
SC 3/4 - 16	M923844057	ECO S/ECO 50 (B)	1.50	-	1.00	-	-	2.0
SC M20 x 1,5	M924057058	ECO S/ECO 50 M (B)	(38,0)	-	(25,0)	(22,0)	(12,0)	(63)
SC 1-12 x 1	M923846057	ECO 100 (B)	1.75	-	1.50	-	-	8.0
SC M25 x 1,5	M923846171	ECO 100 MF (B)	(44,5)	-	(38,0)	(32,0)	(15,0)	(215)

Accessories

ECO 8 → ECO 100 Series

Side Load Adaptor (SLA)

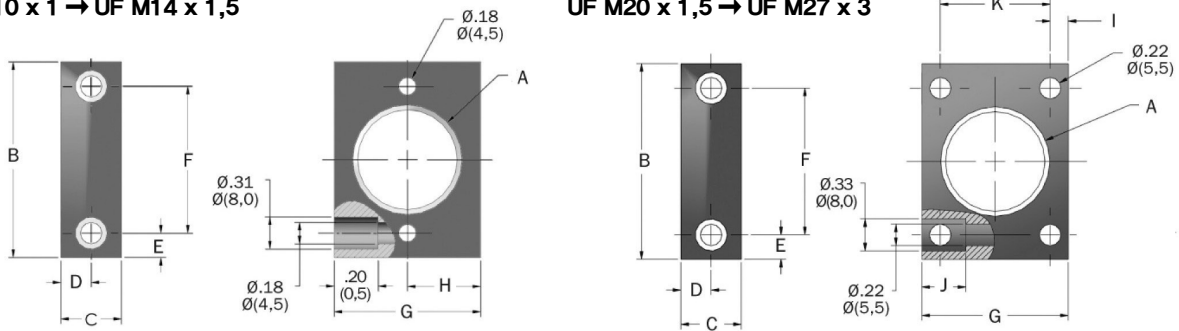


Catalog No. / Model	ECO Series Part Number	Model (Ref)	Stroke in. (mm)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)	S in. (mm)	WF in. (mm)	WL in. (mm)
SLA 7/16 - 28 x .28	SLA 33974	ECO 10	.28	.47	.43	7/16-28 UNEF	.20	.87	.63	.56	.16
SLA 10 MF	SLA 33457	ECO 10 MF	(6,4)	(12)	(11)	M10 x 1	(5,0)	(21,9)	(13,0)	(11,0)	(4,0)
SLA 7/16 - 28 x .41	SLA 33844	ECO 15 IF	.41	.71	.55	7/16-28 UNEF	.24	1.28	.63	.56	.28
SLA 12 MF	SLA 33299	ECO 15 MF	(10,0)	(18)	(14)	M12 x 1	(6,0)	(32,4)	(14,0)	(13,0)	(7,0)
SLA 1 1/2 - 20 x .41	SLA 71146	ECO 15 IC	.41	.71	.55	1/2-20 UNF	.24	1.28	.63	.56	.28
SLA 1 1/2 - 20 x .63	SLA 33849	ECO 25 IF	.63	1.02	.51	1/2-20 UNF	.31	1.62	.71	.63	.28
SLA 14 MF	SLA 33297	ECO 25 MF	(16,0)	(26)	(13)	M14 x 1	(8,0)	(45,2)	(18,0)	(15,0)	(7,0)
SLA 9/16 - 18 x .63	SLA 33850	ECO 25 IC	.63	1.02	.51	9/16-18 UNF	.31	1.62	.71	.63	.28
SLA 14 MC	SLA 33298	ECO 25 MC	(12,7)	(20)	(16)	M14 x 1,5	(8,0)	(39,2)	(18,0)	(15,0)	(7,0)
SLA 14 MFS	SLA 33306	ECO S 25 MF	(12,7)	(20)	(16)	M14 x 1	(8,0)	(39,2)	(18,0)	(15,0)	(7,0)
SLA 7/16 - 18 x .50	SLA 33846	ECO S 25 IC	.5	.79	.63	9/16-18 UNF	.31	1.55	.71	.63	.28
SLA 14 MCS	SLA 33301	ECO S 25 MC	(12,7)	(20)	(16)	M14 x 1,5	(8,0)	(39,2)	(18,0)	(15,0)	(7,0)
SLA 3/4 - 16 x .88	SLA 33851	ECO 50	.88	1.26	.67	3/4-16 UNF	.43	2.44	.98	.88	.28
SLA 20 MC	SLA 33302	ECO 50 M	(22,0)	(32)	(17)	M20 x 1,5	(11,0)	(62,0)	(25,0)	(22,0)	(7,0)
SLA 3/4 - 16 x .50	SLA 33847	ECO S 50	.5	.94	.55	3/4-16 UNF	.43	1.64	.98	.88	.28
SLA 20 MCS	SLA 33262	ECO S 50 M	(12,7)	(24)	(14)	M20 x 1,5	(11,0)	(41,5)	(25,0)	(22,0)	(7,0)
SLA 1-12 x 1	SLA 33848	ECO 100	1.00	1.50	1.18	1-12 UNF	.59	2.88	1.42	1.25	.39
SLA 25 MF	SLA 33263	ECO 100 MF	(25,4)	(38)	(30)	M25 x 1,5	(15,0)	(73,2)	(36,0)	(32,0)	(7,0)
SLA 25 MC	SLA 33296	ECO 100 MC	(25,4)	(38)	(30)	M27 x 3	(15,0)	(73,2)	(36,0)	(32,0)	(10,0)

Universal Retaining Flange (UF)

UF 3/8 - 32 → UF 1/2 - 20
UF M10 x 1 → UF M14 x 1,5

UF 9/16 - 18 → UF 3/4 - 16
UF M20 x 1,5 → UF M27 x 3

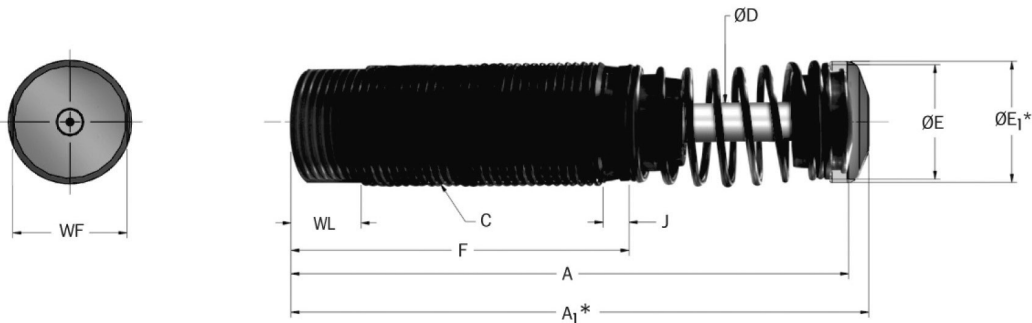


Catalog No. / Model	ECO Series Part Number	Model (Ref)	A in. (mm)	B in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)	F in. (mm)	G in. (mm)	H in. (mm)	I in. (mm)	J in. (mm)	K in. (mm)
UF 3/8 - 32	U19070095	ECO 8	3/8 - 32 UNF	1.50	.56	.28	.25	1.00	1.00	0.50	-	.20	-
UF M10 x 1	U16363189	ECO 10M	M10 x 1	(38,0)	(12,0)	(6,0)	(6,25)	(25,5)	(25,0)	(12,5)	-	(5,0)	-
UF 7/16 - 28	U15588095	ECO 15(B)/ECO 10(B)	7/16 - 28 UNF	1.50	.56	.28	.25	1.00	1.00	0.50	-	.20	-
UF M12 x 1	U15588189	ECO 15M (B)	M12 x 1	(38,0)	(12,0)	(6,0)	(6,25)	(25,5)	(25,0)	(12,5)	-	(5,0)	-
UF 1/2 - 20	U13935095	ECO 25 IF (B)	1/2 - 20 UNF	1.50	.56	.28	.25	1.00	1.00	0.50	-	.20	-
UF M14 x 1	U14950189	ECO/ECO S 25 MF (B)	M14 x 1,5	(45,0)	(16,0)	(8,0)	(5,0)	(35,0)	(30,0)	(15,0)	-	(5,0)	-
UF 9/16 - 18	U19018095	ECO/ECO S 25 IC (B)	9/16 - 18 UNF	1.81	.62	.31	.22	1.38	1.38	-	.19	.32	1.00
UF M14 x 1,5	U13935143	ECO/ECO S 25 MC (B)	M14 x 1,5	(45,0)	(16,0)	(8,0)	(5,0)	(35,0)	(30,0)	(15,0)	-	(5,0)	-
UF 3/4 - 16	U120275095	ECO/ECO S 50 (B)	3/4 - 16 UNF	2.00	0.62	0.31	0.25	1.50	1.50	-	0.19	0.45	1.12
UF M20x 1,5	U12646143	ECO/ECO S 50 MC (B)	M20 x 1,5	(48,0)	(16,0)	(8,0)	(6,5)	(35,0)	(35,0)	-	(4,75)	(10,0)	(25,5)
UF 1-12	U19599095	ECO 100	1-12 UNF	2.00	.62	.31	.25	1.50	1.50	-	.19	.39	(25,5)
UF M25 x 1,5	U13004143	ECO 100/110M	M25 x 1,5	(48,0)	(16,0)	(8,0)	(6,5)	(35,0)	(35,0)	-	(4,75)	(10,0)	(25,5)
UF M27 x 3	U12587143	ECO 100 MC	M27 X 3	(48,0)	(16,0)	(8,0)	(6,5)	(35,0)	(35,0)	-	(4,75)	(10,0)	(25,5)

Technical Data

ECO 110 → ECO 225 Series

Standard



Catalog No. / Model	(S) Stroke in. (mm)	(E _T) Max. in.-lbs./cycle (Nm/cycle)	(E _T E) Emergen cy Max. in.-lbs./cycle (Nm/cycle)	(FP) (E _T C) Max.in.- lbs./hour (Nm/h)	(F _D) Max.Reaction Force lbs. (N)	Nominal Coil Spring Force		Max. Propelling Force lbs. (N)	Weight (mass) lbs. (Kg)
						Extended lbs. (N)	Compressed lbs.(N)		
ECO 110 IF (B)	1.56	1,860	-	743,500	1,700	4.0	11.0	500	16.0
ECO 110 MF (B)	(40,0)	(210,0)	-	(84 000)	(7 500)	(18,0)	(49,0)	(2 220)	(454)
ECO 110 MC (B)	(40,0)	(210,0)	-	(84 000)	(7 500)	(18,0)	(49,0)	(2 220)	(454)
ECO 120 IF (B)	0.95	1,640	4,425	743,500	2,500	12.5	20.0	700	17.0
ECO 120 MF (B)	(25,0)	(185,0)	(500)	(84 000)	(11 120)	(56,0)	(89,0)	(3 100)	(482)
ECO 125 IF (B)	0.95	1,640	4,425	920,500	2,500	12.5	20.0	700	21.0
ECO 125 MF (B)	(25,0)	(185,0)	(500)	(104 000)	(11 120)	(56,0)	(89,0)	(3 100)	(595)
ECO 220 IF (B)	1.96	3,100	8,850	911,600	2,500	7.0	20.0	700	23.0
ECO 220 MF (B)	(50,0)	(350,0)	(1 000)	(103 000)	(11 120)	(31,0)	(89,0)	(3 100)	(652)
ECO 225 IF (B)	1.96	3,100	8,850	1,124,000	2,500	7.0	20.0	700	27.0
ECO 225 MF (B)	(50,0)	(350,0)	(1 000)	(127 000)	(11 120)	(31,0)	(89,0)	(3 100)	(765)

■주의 : E_TE의 수치의 경우 (1~5회 미만) 비상용으로 사용될 경우에만 참고하십시오.

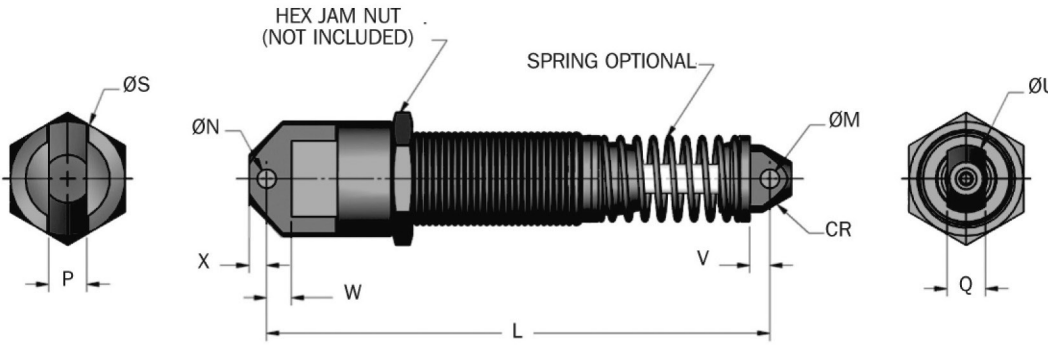
Catalog No. / Model	Damping Constant	A in. (mm)	A ₁ in. (mm)	C in. (mm)	D in. (mm)	E in. (mm)	E ₁ in. (mm)	F in. (mm)	J in. (mm)	WF in. (mm)	WL in. (mm)
ECO 110 IF (B)	-1,-2,-3	7.93	8.06	1-12 UNF	.31	0.88	0.88	5.00	.06	-	-
ECO 110 MF (B)	-1,-2,-3	(201,4)	(204,7)	(M25 x 1,5)	(8,0)	(22,2)	(22,2)	(127,0)	(1,5)	-	-
ECO 110 MC (B)	-1,-2,-3	(201,4)	(204,7)	(M25 x 1,5)	(8,0)	(22,2)	(22,2)	(127,0)	(1,5)	-	-
ECO 120 IF (B)	-1,-2,-3	5.52	5.72	1 1/4-12 UNF	.38	1.13	1.20	3.41	.21	1.12	.63
ECO 120MF (B)	-1,-2,-3	(140,2)	(145,3)	M33 x 1,5	(9,5)	(29,0)	(30,5)	(87,0)	(5,3)	(30,0)	(16,0)
ECO 125 IF (B)	-1,-2,-3	5.52	5.72	1 3/8-12 UNF	.38	1.13	1.20	3.41	.21	1.12	.63
ECO 125 MF (B)	-1,-2,-3	(140,2)	(145,3)	M36 x 1,5	(9,5)	(29,0)	(30,5)	(87,0)	(5,3)	(33,0)	(16,0)
ECO 220 IF (B)	-1,-2,-3	8.14	8.34	1 1/4-12 UNF	.38	1.13	1.20	5.03	.21	1.12	.63
ECO 220 MF (B)	-1,-2,-3	(207,0)	(212,0)	M33 x 1,5	(9,5)	(29,0)	(30,5)	(128,0)	(5,3)	(30,0)	(16,0)
ECO 225 IF (B)	-1,-2,-3	8.14	8.34	1 3/8-12 UNF	.38	1.13	1.20	5.03	.21	1.25	.63
ECO 225 MF (B)	-1,-2,-3	(207,0)	(212,0)	M36 x 1,5	(9,5)	(29,0)	(30,5)	(128,0)	(5,3)	(33,0)	(16,0)

■참조 : 그래프는 P53을 참조 하십시오.

ECO 120 → ECO 225 Series

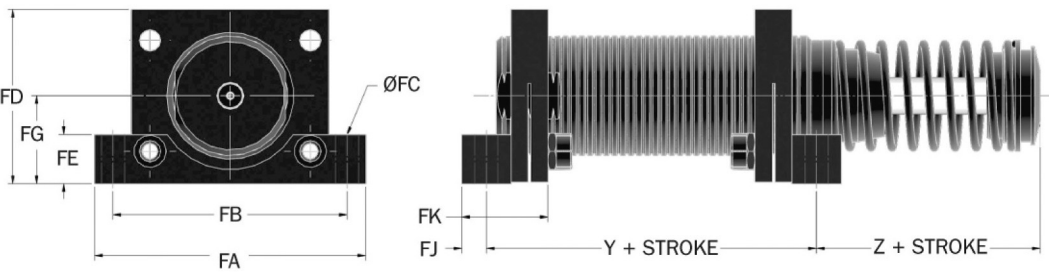
Clevis Mount

Accessories



Catalog No./ Model	L in. (mm)	M +.005/-0.000 in. (mm)	N +.005/-0.000 in. (mm)	P +.000/-0.010 in. (mm)	Q +.000/-0.010 in. (mm)	S in. (mm)	U in. (mm)	V in. (mm)	W in. (mm)	X in. (mm)	CR in. (mm)	Weight (mass) lbs. (Kg)
ECO 120 CM (S)	6.59 (167)	.251 (6,38)	.251 (6,38)	.500 (12,70)	.500 (12,70)	1.50 (38)	.88 (23)	.23 (6)	.48 (12)	.31 (6,1)	.44 (11,2)	1.3 (0,59)
ECO 220 CM (S)	9.22 (234)	.251 (6,38)	.251 (6,38)	.500 (12,70)	.500 (12,70)	1.50 (38)	.88 (23)	.23 (6)	.48 (12)	.31 (6,1)	.44 (11,2)	1.7 (0,77)
ECO 125 CM (S)	6.59 (180)	.251 (6,38)	.251 (6,38)	.500 (12,70)	.500 (12,70)	1.50 (38)	.88 (22)	.23 (6)	.93 (24)	.23 (6,0)	.44 (11,2)	1.6 (0,73)
ECO 225 CM (S)	9.22 (230)	.251 (6,38)	.251 (6,38)	.500 (12,70)	.500 (12,70)	1.50 (38)	.88 (22)	.23 (6)	.93 (24)	.23 (6,0)	.44 (11,2)	1.9 (0,86)

Flange Foot Mount

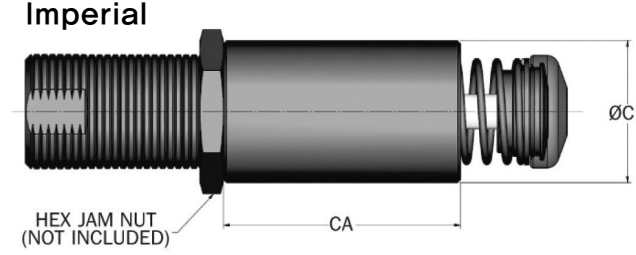
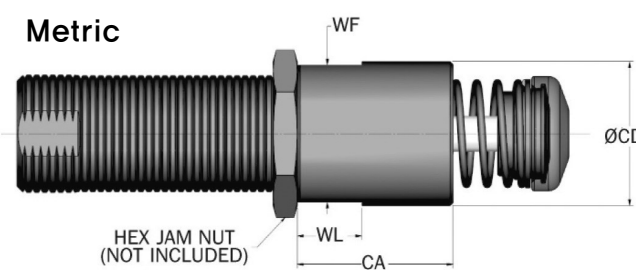


Catalog No./ Model	Part Number	Model (Ref)	Y in. (mm)	Z in. (mm)	FA in. (mm)	FB in. (mm)	FC in. (mm)	FD in. (mm)	FE in. (mm)	FG in. (mm)	FJ in. (mm)	FK in. (mm)	Bolt Size in. (mm)	Kit Weight oz. (g)
FM 1 1/4 - 12	2F21049305	ECO 120/220	2.25 (57,2)	1.25 (31,8)	2.75 (70,0)	2.38 (60,3)	.23 (5,90)	1.77 (45,0)	.50 (12,7)	.90 (22,7)	.25 (6,4)	.88 (22,2)	#10 (M5)	4.0 (100)
FM M33 x 1,5	2F21049306	ECO 120/220M												
FM 1 3/8 - 12	2F21293305	ECO 125/225	2.25 (57,2)	1.25 (31,8)	2.75 (70,0)	2.38 (60,3)	.23 (5,90)	1.77 (45,0)	.50 (12,7)	.90 (22,7)	.25 (6,4)	.88 (22,2)	#10 (M5)	4.0 (100)
FM M36 x 1,5	2F21293306	ECO 125/225M												

ECO 120 → ECO 225 Series

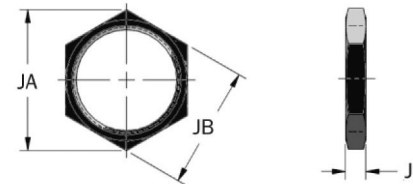
Stop Collar (SC)

Accessories

Catalog No./ Model	Part Number	Model (Ref)	CA in. (mm)	CD in. (mm)	WF in. (mm)	WL in. (mm)	Weight (mass) oz. (g)
SC 1 1/4-12	M921049057	ECO 120/220	2.50 (41,0)	1.50 (38,0)	-	-	7.0 (210)
SC M33 x 1,5	M930290171	ECO 120/220 M			(36,0)	(17,0)	
SC 1 3/8-12	M921293057	ECO 120/220	2.50 (63,5)	1.69 (43,0)	-	-	7.0 (210)
SC M36 x 1,5	M930285058	ECO 120/220 M			(41,0)	(18,0)	

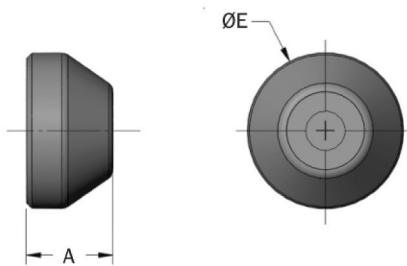
Jam Nut (JN)



Catalog No./ Model	Part Number	Model (Ref)	JA in. (mm)	JB in. (mm)	JH in. (mm)	Weight (mass) oz. (g)
JN 1 1/4-12	J18609034	ECO 120/220	1.73 (47,3)	1.50 (41,0)	.25 (6,4)	0.9 (27)
JN M33 x 1,5	J28609035	ECO 120/220 M				
JN 1 3/8-12	J13164034	ECO 125/225	1.73 (47,3)	1.50 (41,0)	.25 (6,4)	0.9 (27)
JN M36 x 1,5	J23164034	ECO 125/225 M				

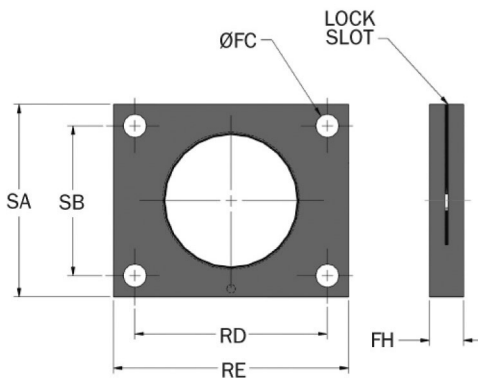
ECO 120 → ECO 225 Series

Urethane Striker Cap (USC)



Catalog No./Model	Part Number	Model (Ref)	A in. (mm)	E ₁ in. (mm)	Weight (mass) oz. (g)
UC 8609	C98609079	ECO 120, 125, 220 & 225	39 (10,0)	1.20 (30,5)	0.1 (3)

Rectangular Flange (RF)

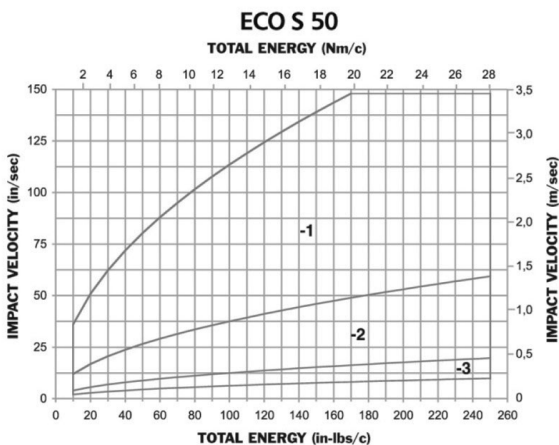
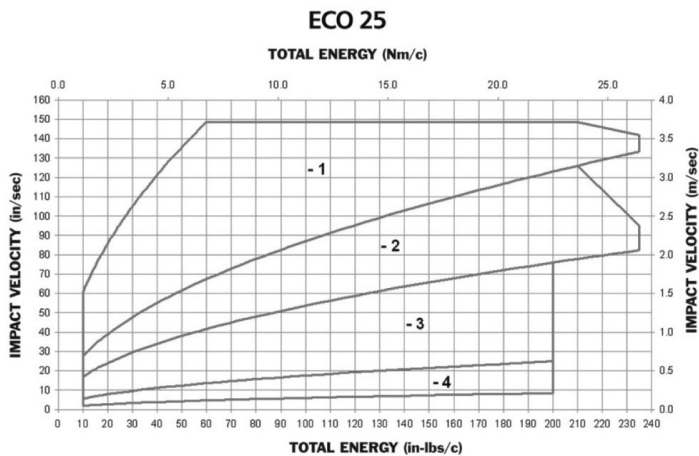
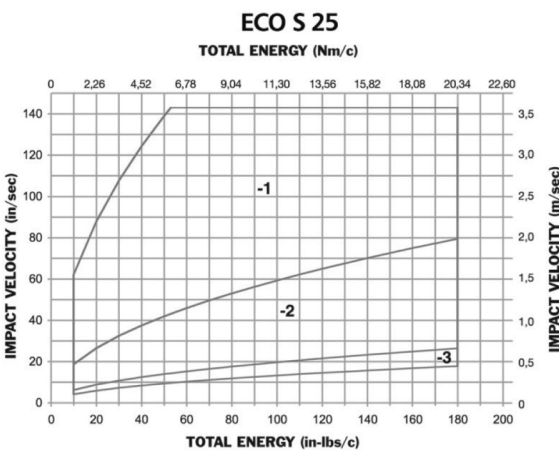
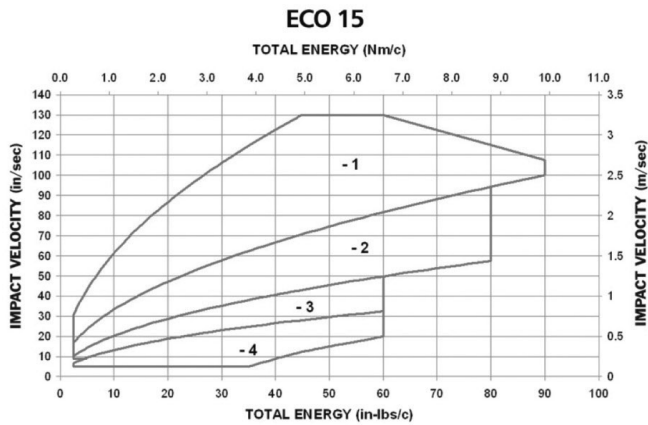
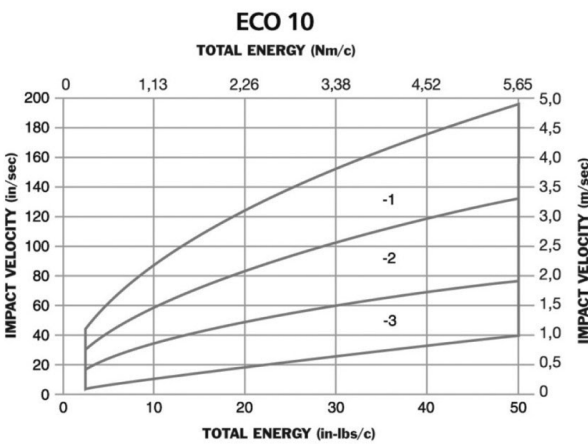
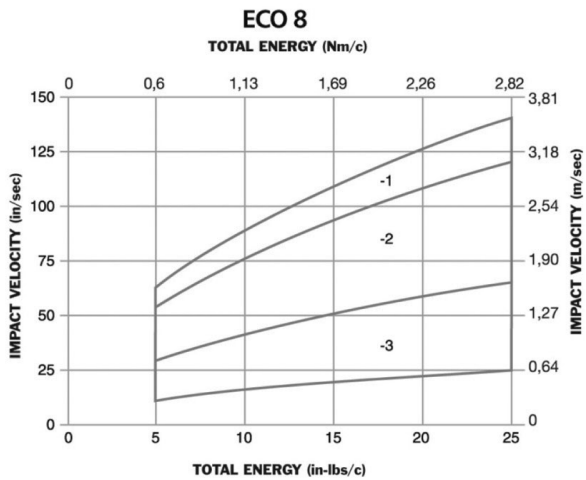


Catalog No./Model	Part Number	Model (Ref)	FC in. (mm)	FH in. (mm)	RD in. (mm)	RE in. (mm)	SA in. (mm)	SB in. (mm)	Bolt Size in. (mm)	Wt. (mass) oz. (g)
RF 1 1/4 - 12	N121049129	ECO 120/220	.22 (5,5)	.38 (9,5)	1.63 (41,3)	2.00 (50,8)	1.75 (44,5)	1.13 (28,6)	#10 (M5)	1.0 (30)
RF M33 x 1,5	N121049141	ECO 120/ 220M								
RF 1 3/8 - 12	N121293129	ECO 125/225	.22 (5,5)	.38 (9,5)	1.63 (41,3)	2.00 (58,8)	1.75 (44,5)	1.13 (28,6)	#10 (M5)	1.0 (30)
RF M36 x 1,5	N121293129	ECO 125/225M								

Accessories

ECO 8 → ECO 550 Series

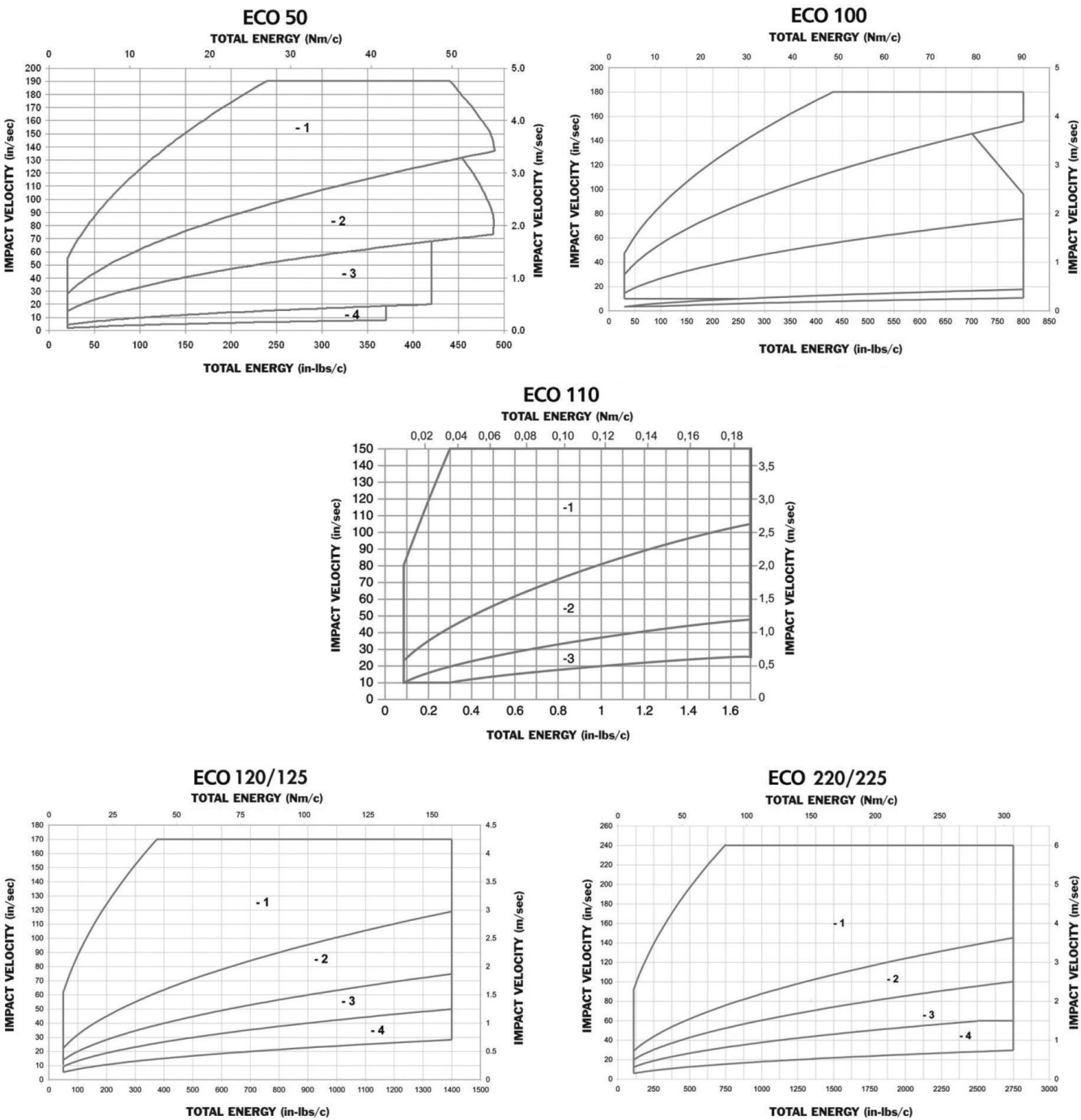
Sizing Curves



■주의 : ECO Model의 최저 충돌 속도는 0,1m/sec 입니다.

Sizing Curves

ECO 120 → ECO 225 Series



■주의 : ECO Model의 최저 충돌 속도는 0.1m/sec 입니다.

PM / PRO → ECO 대치표

PMX 8	
PM/PRO Series	ECO Series
PMX 8 IF-1	ECO 8 IF-1
PMX 8 IF-1B	ECO 8 IF-1B
PMX 8 IF-2	ECO 8 IF-2
PMX 8 IF-2B	ECO 8 IF-2B
PMX 8 IF-3	ECO 8 IF-3
PMX 8 IF-3B	ECO 8 IF-3B
PMX 8 MC-1	ECO 8 MC-1
PMX 8 MC-1B	ECO 8 MC-1B
PMX 8 MC-2	ECO 8 MC-2
PMX 8 MC-2B	ECO 8 MC-2B
PMX 8 MC-3	ECO 8 MC-3
PMX 8 MC-3B	ECO 8 MC-3B
PMX 8 MF-1	ECO 8 MF-1
PMX 8 MF-1B	ECO 8 MF-1B
PMX 8 MF-2	ECO 8 MF-2
PMX 8 MF-2B	ECO 8 MF-2B
PMX 8 MF-3	ECO 8 MF-3
PMX 8 MF-3B	ECO 8 MF-3B

PMX 10	
PM/PRO Series	ECO Series
PMX 10 IF-1	ECO 10 IF-1
PMX 10 IF-1B	ECO 10 IF-1B
PMX 10 IF-2	ECO 10 IF-2
PMX 10 IF-2B	ECO 10 IF-2B
PMX 10 IF-3	ECO 10 IF-3
PMX 10 IF-3B	ECO10 IF-3B
PMX 10 MF-1	ECO 10 MF-1
PMX 10 MF-1B	ECO 10 MF-1B
PMX 10 MF-2	ECO 10 MF-2
PMX 10 MF-2B	ECO 10 MF-2B
PMX 10 MF-3	ECO 10 MF-3
PMX 10 MF-3B	ECO 10 MF-3B

PM/PRO 15	
PM/PRO Series	ECO Series
PM 15 IC-1	ECO 15 IC-2
PM 15 IC-1B	ECO 15 IC-2B
PM 15 IC-2	ECO 15 IC-3
PM 15 IC-2B	ECO 15 IC-3B
PM 15 IC-3	ECO 15 IC-4
PM 15 IC-3B	ECO 15 IC-4B
PM 15 IF-1	ECO 15 IF-2
PM 15 IF-1B	ECO 15 IF-2B
PM 15 IF-2	ECO 15 IF-3
PM 15 IF-2B	ECO 15 IF-3B
PM 15 IF-3	ECO 15 IF-4
PM 15 IF-3B	ECO 15 IF-4B
PM 15 MF-1	ECO 15 MF-2
PM 15 MF-1B	ECO 15 MF-2B
PM 15 MF-2	ECO 15 MF-3
PM 15 MF-2B	ECO 15 MF-3B
PM 15 MF-3	ECO 15 MF-4
PM 15 MF-3B	ECO 15 MF-4B
PRO 15 IC-1	ECO 15 IC-1
PRO 15 IC-1B	ECO 15 IC-1B
PRO 15 IC-2	ECO 15 IC-2
PRO 15 IC-2B	ECO 15 IC-2B
PRO 15 IC-3	ECO 15 IC-3
PRO 15 IC-3B	ECO 15 IC-3B
PRO 15 IF-1	ECO 15 IF-1
PRO 15 IF-1B	ECO 15 IF-1B
PRO 15 IF-2	ECO 15 IF-2
PRO 15 IF-2B	ECO 15 IF-2B
PRO 15 IF-3	ECO 15 IF-3
PRO 15 IF-3B	ECO 15 IF-3B
PRO 15 MF-1	ECO 15 MF-1
PRO 15 MF-1B	ECO 15 MF-1B
PRO 15 MF-2	ECO 15 MF-2
PRO 15 MF-2B	ECO 15 MF-2B
PRO 15 MF-3	ECO 15 MF-3
PRO 15 MF-3B	ECO 15 MF-3B

PM / PRO to ECO Interchange List

PM / PRO → ECO 대치표

PM / PRO 25	
PM/PRO Series	ECO Series
PM 25 IC-1	ECO 25 IC-2
PM 25 IC-1B	ECO 25 IC-2B
PM 25 IC-2	ECO 25 IC-3
PM 25 IC-2B	ECO 25 IC-3B
PM 25 IC-3	ECO 25 IC-4
PM 25 IC-3B	ECO 25 IC-4B
PM 25 IF-1	ECO 25 IF-2
PM 25 IF-1B	ECO 25 IF-2B
PM 25 IF-2	ECO 25 IF-3
PM 25 IF-2B	ECO 25 IF-3B
PM 25 IF-3	ECO 25 IF-4
PM 25 IF-3B	ECO 25 IF-4B
PM 25 MC-1	ECO 25 MC-2
PM 25 MC-1B	ECO 25 MC-2B
PM 25 MC-2	ECO 25 MC-3
PM 25 MC-2B	ECO 25 MC-3B
PM 25 MC-3	ECO 25 MC-4
PM 25 MC-3B	ECO 25 MC-4B
PM 25 MF-1	ECO 25 MF-2
PM 25 MF-1B	ECO 25 MF-2B
PM 25 MF-2	ECO 25 MF-3
PM 25 MF-2B	ECO 25 MF-3B
PM 25 MF-3	ECO 25 MF-4
PM 25 MF-3B	ECO 25 MF-4B
PRO 25 IC-1	ECO 25 IC-1
PRO 25 IC-1B	ECO 25 IC-1B
PRO 25 IC-2	ECO 25 IC-2
PRO 25 IC-2B	ECO 25 IC-2B
PRO 25 IC-3	ECO 25 IC-3
PRO 25 IC-3B	ECO 25 IC-3B
PRO 25 IF-1	ECO 25 IF-1
PRO 25 IF-1B	ECO 25 IF-1B
PRO 25 IF-2	ECO 25 IF-2
PRO 25 IF-2B	ECO 25 IF-2B
PRO 25 IF-3	ECO 25 IF-3
PRO 25 IF-3B	ECO 25 IF-3B
PRO 25 MC-1	ECO 25 MC-1
PRO 25 MC-1B	ECO 25 MC-1B
PRO 25 MC-2	ECO 25 MC-2
PRO 25 MC-2B	ECO 25 MC-2B
PRO 25 MC-3	ECO 25 MC-3
PRO 25 MC-3B	ECO 25 MC-3B
PRO 25 MF-1	ECO 25 MF-1
PRO 25 MF-1B	ECO 25 MF-1B

PM / PRO 25	
PM/PRO Series	ECO Series
PRO 25 MF-2	ECO 25 MF-2
PRO 25 MF-2B	ECO 25 MF-2B
PRO 25 MF-3	ECO 25 MF-3
PRO 25 MF-3B	ECO 25 MF-3B

PM / PRO 50	
PM/PRO Series	ECO Series
PM 50 IF-1	ECO 50 IF-2
PM 50 IF-1B	ECO 50 IF-2B
PM 50 IF-2	ECO 50 IF-3
PM 50 IF-2B	ECO 50 IF-3B
PM 50 IF-3	ECO 50 IF-4
PM 50 IF-3B	ECO 50 IF-4B
PM 50 MC-1	ECO 50 MC-2
PM 50 MC-1B	ECO 50 MC-2B
PM 50 MC-2	ECO 50 MC-3
PM 50 MC-2B	ECO 50 MC-3B
PM 50 MC-3	ECO 50 MC-4
PM 50 MC-3B	ECO 50 MC-4B
PM 50 MF-1	ECO 50 MF-2
PM 50 MF-1B	ECO 50 MF-2B
PM 50 MF-2	ECO 50 MF-3
PM 50 MF-2B	ECO 50 MF-3B
PM 50 MF-3	ECO 50 MF-4
PM 50 MF-3B	ECO 50 MF-4B
PRO 50 IF-1	ECO 50 IF-1
PRO 50 IF-1B	ECO 50 IF-1B
PRO 50 IF-2	ECO 50 IF-2
PRO 50 IF-2B	ECO 50 IF-2B
PRO 50 IF-3	ECO 50 IF-3
PRO 50 IF-3B	ECO 50 IF-3B
PRO 50 MC-1	ECO 50 MC-1
PRO 50 MC-1B	ECO 50 MC-1B
PRO 50 MC-2	ECO 50 MC-2
PRO 50 MC-2B	ECO 50 MC-2B
PRO 50 MC-3	ECO 50 MC-3
PRO 50 MC-3B	ECO 50 MC-3B
PRO 50 MF-1	ECO 50 MF-1
PRO 50 MF-1B	ECO 50 MF-1B
PRO 50 MF-2	ECO 50 MF-2
PRO 50 MF-2B	ECO 50 MF-2B
PRO 50 MF-3	ECO 50 MF-3
PRO 50 MF-3B	ECO 50 MF-3B

PM / PRO to ECO Interchange List

PM / PRO → ECO 대치표

PM / PRO 100	
PM/PRO Series	ECO Series
PM 100 IF-1	ECO 100 IF-2
PM 100 IF-1B	ECO 100 IF-2B
PM 100 IF-2	ECO 100 IF-3
PM 100 IF-2B	ECO 100 IF-3B
PM 100 IF-3	ECO 100 IF-4
PM 100 IF-3B	ECO 100 IF-4B
PM 100 MC-1	ECO 100 MC-2
PM 100 MC-1B	ECO 100 MC-2B
PM 100 MC-2	ECO 100 MC-3
PM 100 MC-2B	ECO 100 MC-3B
PM 100 MC-3	ECO 100 MC-4
PM 100 MC-3B	ECO 100 MC-4B
PM 100 MF-1	ECO 100 MF-2
PM 100 MF-1B	ECO 100 MF-2B
PM 100 MF-2	ECO 100 MF-3
PM 100 MF-2B	ECO 100 MF-3B
PM 100 MF-3	ECO 100 MF-4
PM 100 MF-3B	ECO 100 MF-4B
PRO 100 IF-1	ECO 100 IF-1
PRO 100 IF-1B	ECO 100 IF-1B
PRO 100 IF-2	ECO 100 IF-2
PRO 100 IF-2B	ECO 100 IF-2B
PRO 100 IF-3	ECO 100 IF-3
PRO 100 IF-3B	ECO 100 IF-3B
PRO 100 MC-1	ECO 100 MC-1
PRO 100 MC-1B	ECO 100 MC-1B
PRO 100 MC-2	ECO 100 MC-2
PRO 100 MC-2B	ECO 100 MC-2B
PRO 100 MC-3	ECO 100 MC-3
PRO 100 MC-3B	ECO 100 MC-3B
PRO 100 MF-1	ECO 100 MF-1
PRO 100 MF-1B	ECO 100 MF-1B
PRO 100 MF-2	ECO 100 MF-2
PRO 100 MF-2B	ECO 100 MF-2B
PRO 100 MF-3	ECO 100 MF-3
PRO 100 MF-3B	ECO 100 MF-3B

SHORT PM 25	
PM/PRO Series	ECO Series
SHORT PM 25 IC-1	ECO S 25 IC-1
SHORT PM 25 IC-1B	ECO S 25 IC-1B
SHORT PM 25 IC-2	ECO S 25 IC-2
SHORT PM 25 IC-2B	ECO S 25 IC-2B
SHORT PM 25 IC-3	ECO S 25 IC-3
SHORT PM 25 IC-3B	ECO S 25 IC-3B
SHORT PM 25 IF-1	ECO S 25 IF-1
SHORT PM 25 IF-1B	ECO S 25 IF-1B
SHORT PM 25 IF-2	ECO S 25 IF-2
SHORT PM 25 IF-2B	ECO S 25 IF-2B
SHORT PM 25 IF-3	ECO S 25 IF-3
SHORT PM 25 IF-3B	ECO S 25 IF-3B
SHORT PM 25 MC-1	ECO S 25 MC-1
SHORT PM 25 MC-1B	ECO S 25 MC-1B
SHORT PM 25 MC-2	ECO S 25 MC-2
SHORT PM 25 MC-2B	ECO S 25 MC-2B
SHORT PM 25 MC-3	ECO S 25 MC-3
SHORT PM 25 MC-3B	ECO S 25 MC-3B
SHORT PM 25 MF-1	ECO S 25 MF-1
SHORT PM 25 MF-1B	ECO S 25 MF-1B
SHORT PM 25 MF-2	ECO S 25 MF-2
SHORT PM 25 MF-2B	ECO S 25 MF-2B
SHORT PM 25 MF-3	ECO S 25 MF-3
SHORT PM 25 MF-3B	ECO S 25 MF-3B

SHORT PM 50	
PM/PRO Series	ECO Series
SHORT PM 50 IF-1.	ECO S 50 IF-1
SHORT PM 50 IF-1B	ECO S 50 IF-1B
SHORT PM 50 IF-2	ECO S 50 IF-2
SHORT PM 50 IF-2B	ECO S 50 IF-2B
SHORT PM 50 IF-3	ECO S 50 IF-3
SHORT PM 50 IF-3B	ECO S 50 IF-3B
SHORT PM 50 MC-1	ECO S 50 MC-1
SHORT PM 50 MC-1B	ECO S 50 MC-1B
SHORT PM 50 MC-2	ECO S 50 MC-2
SHORT PM 50 MC-2B	ECO S 50 MC-2B
SHORT PM 50 MC-3	ECO S 50 MC-3
SHORT PM 50 MC-3B	ECO S 50 MC-3B