

ATM Series

ATM Series

Interchangeable Block

The ATM Series provides a miniature size design while maintaining high accuracy and rigidity capabilities.

Typical Applications

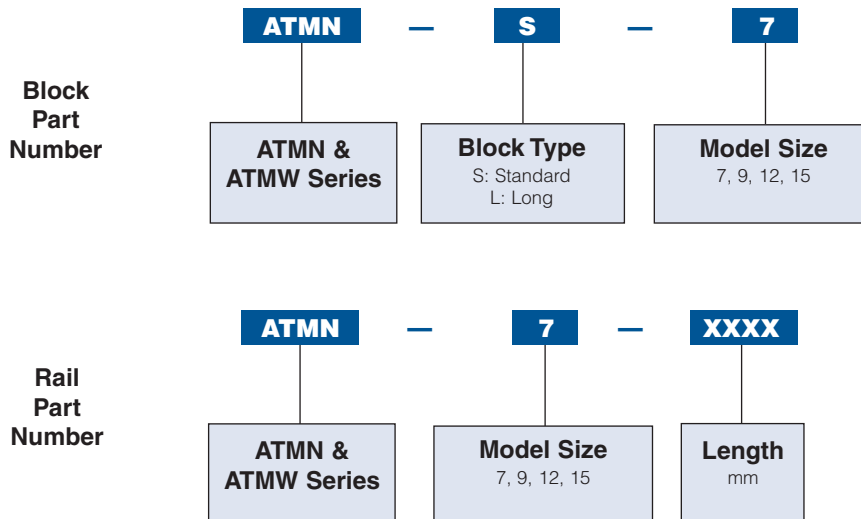
- Miniature Devices
- Medical Equipment
- IC Manufacturing Equipment
- Woodworking Machinery
- X-Y Tables

Preload

The ATM Series is offered with a minimal preload. Higher levels of preload can be provided when desired.

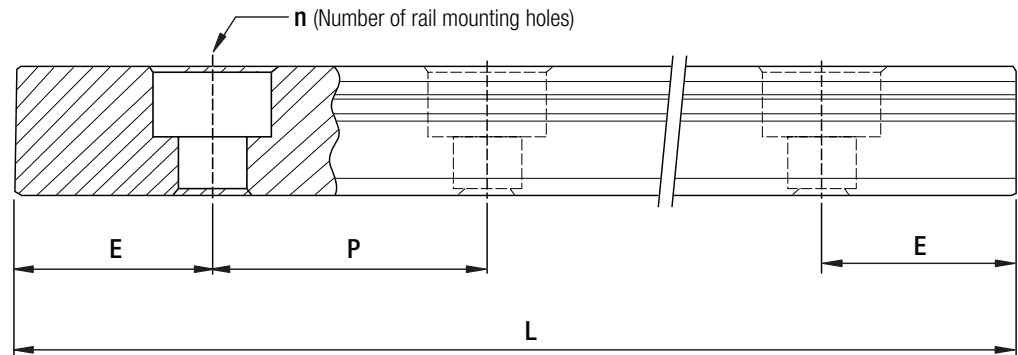


Ordering Number System for ATM Models Example: ATMN-S-7



ATM Series Rail Mounting

Warner Linear has stock of standard length of rails. As for the non-standard E value, to avoid the unstable end part of rail, it is recommended the E value should not be over 1/2 of pitch (P). On the other hand, the E value should not be less than the E_{min} due to the breaking of mounting hole.



$$L = (n - 1) \times P + 2 \times E$$

L: Total length of rail (mm)

n: Number of mounting holes

P: Distance between any two holes (mm)

E: Distance from the center of the last hole to the edge (mm)

Unit: mm

Rail Length Dimensions (standard & maximum)

Item	ATMN7	ATMN9	ATMN12	ATMN15	ATMW7	ATMW9	ATMW12	ATMW15
Std. Length L(n)	40 (3)	55 (3)	70 (3)	70 (2)	80 (3)	80 (3)	110 (3)	110 (3)
	55 (4)	75 (4)	95 (4)	110 (3)	110 (4)	110 (4)	150 (4)	150 (4)
	70 (5)	95 (5)	120 (5)	150 (4)	140 (5)	140 (5)	190 (5)	190 (5)
	85 (6)	115 (6)	145 (6)	190 (5)	170 (6)	170 (6)	230 (6)	230 (6)
	100 (7)	135 (7)	170 (7)	230 (6)	200 (7)	200 (7)	270 (7)	270 (7)
	130 (9)	155 (8)	195 (8)	270 (7)	260 (9)	230 (8)	310 (8)	310 (8)
		175 (9)	220 (9)	310 (8)		260 (9)	350 (9)	350 (9)
		195 (10)	245 (10)	350 (9)		290 (10)	390 (10)	390 (10)
		275 (14)	270 (11)	390 (10)		350 (14)	430 (11)	430 (11)
		375 (19)	320 (13)	430 (11)		500 (19)	510 (13)	510 (13)
			370 (15)	470 (12)		710 (24)	590 (15)	590 (15)
			470 (19)	550 (14)		860 (29)	750 (19)	750 (19)
			570 (23)	670 (17)			910 (23)	910 (23)
		695 (28)	870 (22)			1,070 (27)	1,070 (27)	
Pitch (P)	15	20	25	40	30	30	40	40
Distance to End (E _s)	5	7.5	10	15	10	10	15	15
Max. Std. Length	595 (40)	995 (40)	995 (40)	990 (25)	590 (20)	980 (33)	1,150 (29)	1,150 (29)
Max. Length	600	1,000	1,000	1,000	1,000	1,000	1,200	1,200

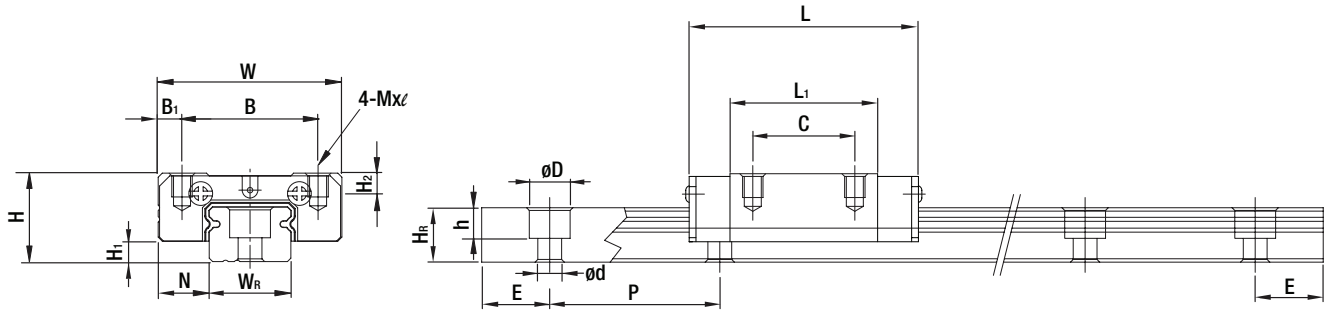
Note: 1. Tolerance of E value for standard rail is 0.5~-0.5 mm. Tolerance of E value for butt-joint is 0~-0.3 mm.

2. Maximum standard length means the max. rail length with standard E value on both sides.

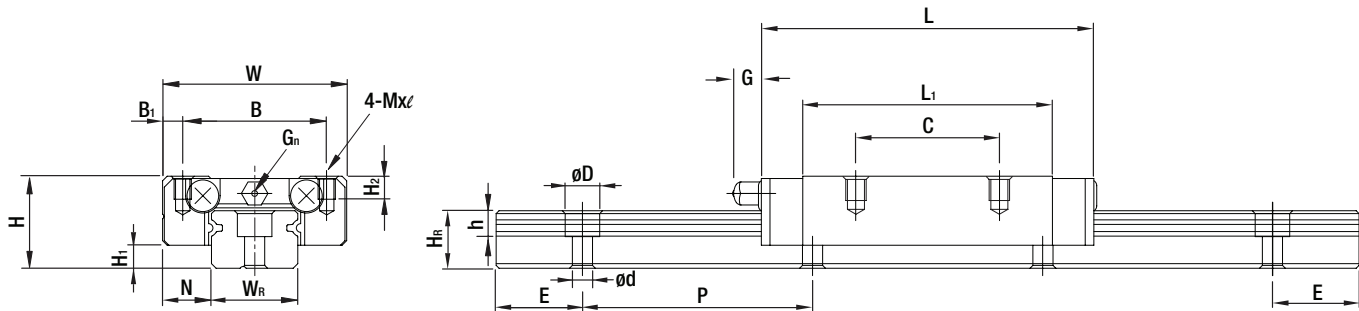
3. If different E value is needed, please contact Warner Linear.

ATM Series

ATMN-S/ATMN-L Type



ATMN 7, ATMN 9, ATMN 12



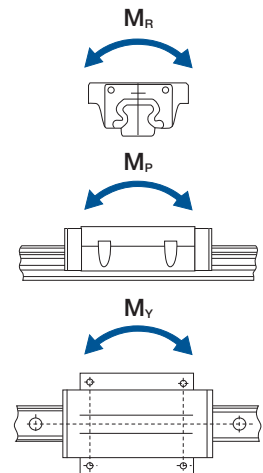
ATMN 15

Dimensions

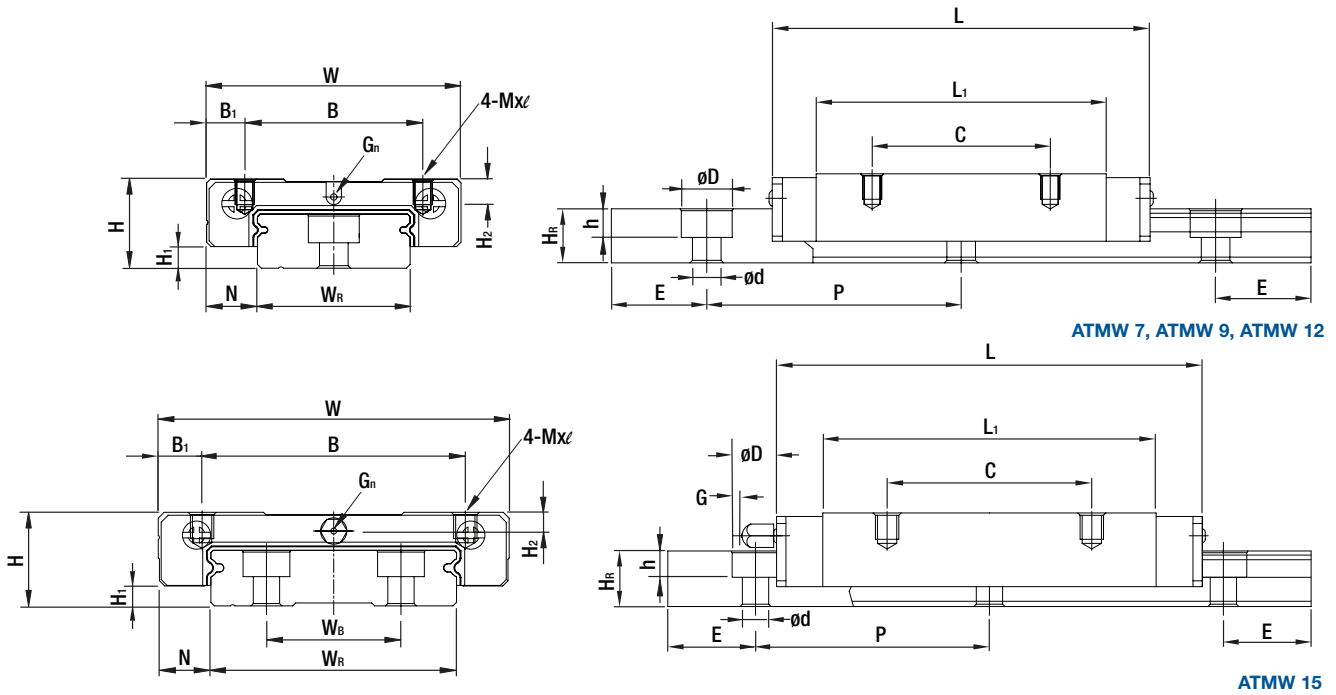
Model No.	Dimensions of Assembly (mm)			Dimensions of Block (mm)									Dimensions of Rail (mm)							
	H	H ₁	N	W	B	B ₁	C	L ₁	L	G	G _n	M x ℓ	H ₂	W _R	H _R	D	h	d	P	E
ATMN-7S ATMN-7L	8	1.5	5	17	12	2.5	8 13	13.5 21.8	22.5 30.8	-	ø0.8	M2x2.5	1.5	7	4.8	4.2	2.3	2.4	15	5
ATMN-9S ATMN-9L	10	2	5.5	20	15	2.5	10 16	18.9 29.9	28.9 39.9	-	ø0.8	M3x3	1.8	9	6.5	6	3.5	3.5	20	7.5
ATMN-12S ATMN-12L	13	3	7.5	27	20	3.5	15 20	21.7 32.4	34.7 45.4	-	ø0.8	M3x3.5	2.5	12	8	6	4.5	3.5	25	10
ATMN-15S ATMN-15L	16	4	8.5	32	25	3.5	20 25	26.7 43.4	42.1 58.8	4.5	GN3S	M3x4	3	15	10	6	4.5	3.5	40	15

Specifications

Model No.	Mounting Bolt for Rail (mm)	Basic Dynamic Load Rating C (kgf)	Basic Static Load Rating C ₀ (kgf)	Static Rated Moment			Weight	
				M _R (kgf-m)	M _P (kgf-m)	M _V (kgf-m)	Block (kg)	Rail (kg/m)
ATMN-7S ATMN-7L	M2x6	100 140	127 200	0.48 0.78	0.29 0.49	0.29 0.49	10 15	0.22
ATMN-9S ATMN-9L	M3x8	190 260	260 410	1.2 2	0.75 1.9	0.75 1.9	16 26	0.38
ATMN-12S ATMN-12L	M3x8	290 380	400 600	2.6 3.9	1.4 3.7	1.4 3.7	34 54	0.65
ATMN-15S ATMN-15L	M3x10	470 650	570 930	4.6 7.5	2.2 5.9	2.2 5.9	59 92	1.06

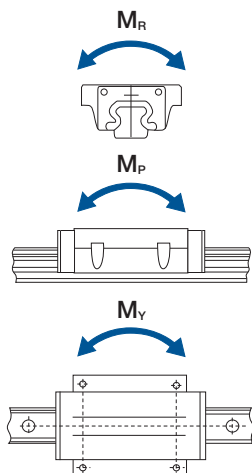


ATMW-S/ATMW-L Type



Dimensions

Model No.	Dimensions of Assembly (mm)			Dimensions of Block (mm)										Dimensions of Rail (mm)							
	H	H ₁	N	W	B	B ₁	C	L ₁	L	G	G _n	M x ℓ	H ₂	W _R	W _B	H _R	D	h	d	P	E
ATMW-7S ATMW-7L	9	1.9	5.5	25	19	3	10 19	21 30.8	31.2 41	-	ø0.9	M3x3	1.85	14	-	5.2	6	3.2	3.5	30	10
ATMW-9S ATMW-9L	12	2.9	6	30	21 23	4.5 3.5	12 24	27.5 38.5	39.3 50.7	-	ø1.0	M3x3	2.4	18	-	7	6	4.5	3.5	30	10
ATMW-12S ATMW-12L	14	3.4	8	40	28	6	15 28	31.3 45.6	46.1 60.4	-	ø1.8	M3x3.6	2.8	24	-	8.5	8	4.5	4.5	40	15
ATMW-15S ATMW-15L	16	3.4	9	60	45	7.5	20 35	38 57	54.8 73.8	5.2	GN3S	M4x4.2	3.2	42	23	9.5	8	4.5	4.5	40	15



Specifications

Model No.	Mounting Bolt for Rail (mm)	Basic Dynamic Load Rating C (kN)	Basic Static Load Rating C ₀ (kN)	Static Rated Moment			Weight	
				M _R (kgf-m)	M _P (kgf-m)	M _Y (kgf-m)	Block (kg)	Rail (kg/m)
ATMW-7S ATMW-7L	M3x6	140 180	210 320	1.6 2.39	0.73 1.58	0.73 1.58	20 29	0.51
ATMW-9S ATMW-9L	M3x8	280 350	420 600	4.09 5.56	1.93 3.47	1.93 3.47	40 57	0.91
ATMW-12S ATMW-12L	M4x8	400 520	570 840	7.17 10.47	2.83 5.85	2.83 5.85	71 103	1.49
ATMW-15S ATMW-15L	M4x10	690 910	940 1410	20.32 30.48	5.78 12.85	5.78 12.85	143 215	2.86