

Automax™ RB Series Declutchable Manual Override

The Automax RB Series declutchable manual override sandwich-mounts between the actuator and the valve or damper. The self-locking, declutchable worm gear design provides a secure, easily engaged, long-lasting override for Automax SuperNova™ actuators. The RB Series manual override is direct-mounted to the actuator for a low-profile design. The override contains internal travel stops, which allow for the valve to be independently operated with the actuator removed.



Features

- 1. Sandwich mounting** — The RB Series declutchable manual override is sandwich-mounted between the actuator and valve/damper for a low-profile design.
- 2. Travel stops** — The RB Series declutchable manual override has internal travel stops, which allow for the valve to be independently operated with the actuator removed.
- 3. Self-locking declutch mechanism** — The declutch handle is securely held in place by a spring-loaded lock pin to ensure gear engagement or disengagement.
- 4. Corrosion-resistant material** — The aluminum cast body has a black epoxy coating for use in wet and corrosive environments.
- 5. Gear plating** — The output gear and worm gear are plated for long-term reliability and service life.

Materials of construction

Part	Material
Housing and Cover	Aluminum – Epoxy Coated
Output Gear	ASTM A536 Ductile Iron
Worm Gear	EN8 Carbon Steel
Eccentric Bearing	Aluminum – Hard Anodized
External Fasteners	304 Stainless Steel
Lubricant	Mobil EP1 Grease

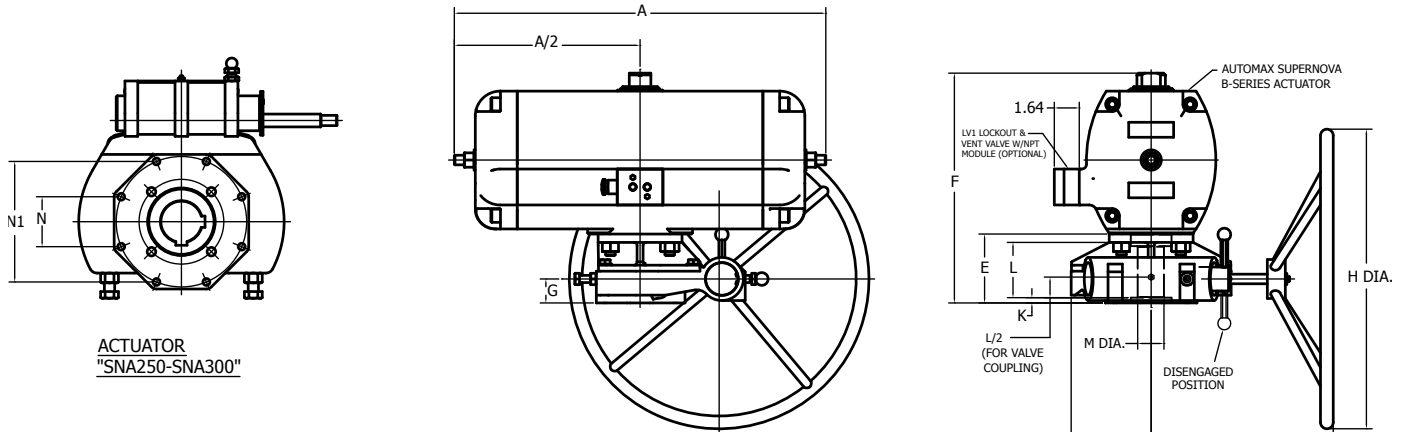
How to order

The manual override is an Automax RB Series declutchable gear override, capable of being sandwich-mounted between the SuperNova actuator and valve. The gear override should also include the Automax LV1 NAMUR lockout and vent valve. The LV1 exhausts internal actuator pressure to the atmosphere while blocking supply pressure. The internal porting of the LV1 also prevents possible corrosive atmospheres from entering the actuator during manual operation.

Declutch torque data

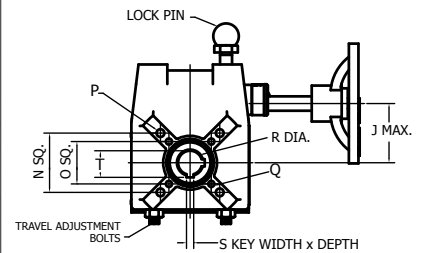
To compensate for gear override declutch torque friction, the actuator output torque should be de-rated by 15 in-lbs for the RB0 gear override. This applies to the RBI050V, RBI063V and RBI085V gear override kits.

Dimensions



ACTUATOR
"SNA250-SNA300"

Actuator	Manual Override	Gear Part No.	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	Handwheel Part No.	H (in)	J (in)	K (in)	L (in)	M (in)
B050	RBI050V	RB0-I	6.69	1.58	5.53	1.93	2.99	6.340	1.00	ARMH100-I	3.94	1.94	0.12	1.38	1.49
B063	RBI063V	RB0-I	7.95	1.77	5.53	1.93	2.99	6.946	1.00	ARMH100-I	3.94	1.94	0.12	1.38	1.49
B085	RBI085V	RB0-I	9.84	2.24	8.84	1.93	2.99	8.647	1.00	ARMH100-I	3.94	1.94	0.12	1.38	1.49
B100	RBI100V	RB1-I	11.65	2.48	8.84	2.87	3.41	9.004	1.42	ARMH150-I	5.91	2.93	0.63	2.05	1.66
B115	RBI115V	RB1-I	13.47	2.91	9.04	2.87	3.41	9.890	1.42	ARMH250-I	9.84	2.93	0.63	2.05	1.66
B125	RBI125V	RB1-I	15.83	3.07	12.01	2.87	3.41	10.382	1.42	ARMH250-I	9.84	2.93	0.63	2.05	1.66
B150	RBI150V	RB2-I-F12	19.13	3.47	12.01	5.26	4.53	12.560	1.57	ARMH300-I	11.81	5.20	0.28	3.38	2.68
B175	RBI175V	RB2-I-F14	21.34	4.17	12.01	5.26	4.53	13.919	1.57	ARMH500-I	19.69	5.20	0.28	3.38	2.68
B200	RBI200V	RB2-I-F14	24.41	4.72	15.87	5.26	4.53	15.099	1.57	ARMH500-I	19.69	5.20	0.28	3.38	2.68
SNA250	RB250V	RB3-I	27.32	6.49	15.87	7.87	6.85	20.980	2.13	ARMH600-I	23.62	7.76	0.39	4.57	5.12
SNA300	RB300V	RB3-I	32.60	7.68	17.83	7.87	6.85	23.530	2.13	ARMH800-I	31.50	7.76	0.39	4.57	5.12



ACTUATOR
"B050-B200"

NOTES:
1. ACTUATOR IS SHOWN IN THE FULL CLOCKWISE POSITION

Actuator	ISO N	N (in)	N1 (in)	ISO O (in)	O (in)	P (in)	Q (in)	R (mm) Max/Min.	S (mm)	T (mm)	Approximate Actuator Weight (lb)		Approximate Gear Assembly Weight (lb)	
											DA	SR		
B050	F07	1.949	-	F05	1.392	5/16-18 UNC X 0.47 DEEP	1/4-20 UNC X 0.38 DEEP	20.04/20.00	6 x 6	22.75	+0.20/-0.00	2.7	3.1	4.5
B063	F07	1.949	-	F05	1.392	5/16-18 UNC X 0.47 DEEP	1/4-20 UNC X 0.38 DEEP	20.04/20.00	6 x 6	22.75	+0.20/-0.00	3.8	4.4	4.5
B085	F07	1.949	-	F05	1.392	5/16-18 UNC X 0.47 DEEP	1/4-20 UNC X 0.38 DEEP	20.04/20.00	6 x 6	22.75	+0.20/-0.00	7.5	9.3	4.5
B100	F10	2.840	-	F07	1.949	3/8-16 UNC X 0.56 DEEP	5/16-18 UNC X 0.47 DEEP	30.03/30.00	8 x 7	33.30	+0.20/-0.00	11.5	14.6	11
B115	F10	2.840	-	F07	1.949	3/8-16 UNC X 0.56 DEEP	5/16-18 UNC X 0.47 DEEP	30.03/30.00	8 x 7	33.30	+0.20/-0.00	17.7	22.5	11
B125	F10	2.840	-	F07	1.949	3/8-16 UNC X 0.56 DEEP	5/16-18 UNC X 0.47 DEEP	30.03/30.00	8 x 7	33.30	+0.20/-0.00	23.8	30.2	11
B150	F14	3.898	-	-	-	5/8-11 UNC X 0.63 DEEP	-	45.00/44.96	14 x 9	48.80	+0.20/-0.00	40.8	51.2	25
B175	F14	3.898	-	-	-	5/8-11 UNC X 0.63 DEEP	-	45.00/44.96	14 x 9	48.80	+0.20/-0.00	63.7	77.2	25
B200	F14	3.898	-	-	-	5/8-11 UNC X 0.63 DEEP	-	45.00/44.96	14 x 9	48.80	+0.20/-0.00	91.5	118	25
SNA250	F25	3.827	9.239	F16	4.594	5/8-11 UNC X 0.67 DEEP*	3/4-10 UNC X 0.87 DEEP	80.00/79.96	22 x 14	85.90	+0.20/-0.00	137	172	120
SNA300	F25	3.827	9.239	F16	4.594	5/8-11 UNC X 0.67 DEEP*	3/4-10 UNC X 0.87 DEEP	80.00/79.96	22 x 14	85.90	+0.20/-0.00	217	288	120

*These units have 8 mounting holes instead of 4.