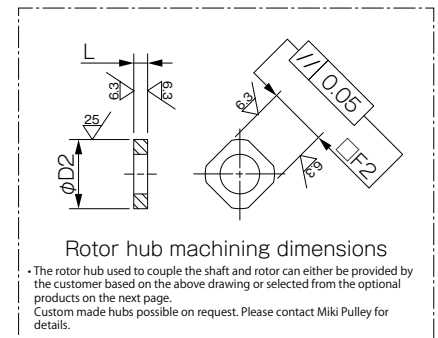
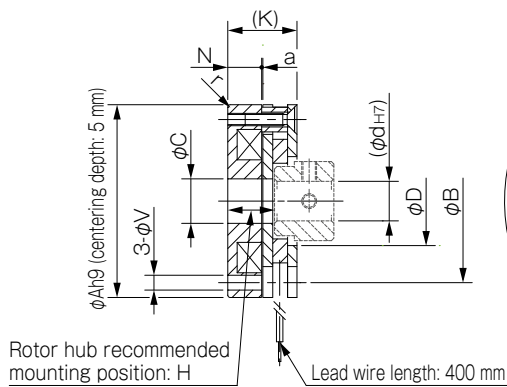


BXR-LE Safety brakes – Datasheet

Specifications (Brake)

Model	Size	Static friction torque Ts [N·m]	Coil [at 20 °C]								Heat resistance class	Lead wire		Max. rotation speed [min ⁻¹]	Rotating part moment of inertia J [kg·m ²]	Allowable braking energy rate E _{ba} [J]	Total braking energy E _t [J]	Armature pull-in time (24 V DC) t _a [s]	Armature release time (7 V DC) t _{ar} [s]	Mass [kg]
			Overexcitation output				Normal excitation output					UL style	Size							
			Voltage [V]	Wattage [W]	Current [A]	Resistance [Ω]	Voltage [V]	Wattage [W]	Current [A]	Resistance [Ω]										
BXR-015-10LE	015	0.06	24	16.5	0.688	35	7	1.4	0.200	35	F	UL3398	AWG26	6000	3.24 × 10 ⁻⁸	5	1000	0.020	0.020	0.03
BXR-020-10LE	020	0.14	24	16.5	0.688	35	7	1.4	0.200	35	F	UL3398	AWG26	6000	7.01 × 10 ⁻⁸	15	3000	0.035	0.020	0.06
BXR-025-10LE	025	0.32	24	16.5	0.688	35	7	1.4	0.200	35	F	UL3398	AWG26	6000	1.96 × 10 ⁻⁷	15	3000	0.035	0.020	0.08
BXR-035-10LE	035	0.62	24	16.5	0.688	35	7	1.4	0.200	35	F	UL3398	AWG26	6000	6.20 × 10 ⁻⁷	87	17000	0.050	0.020	0.12
BXR-040-10LE	040	1.32	24	16.5	0.688	35	7	1.4	0.200	35	F	UL3398	AWG26	6000	1.29 × 10 ⁻⁶	87	17000	0.060	0.020	0.16
BXR-050-10LE	050	3.20	24	16.5	0.688	35	7	1.4	0.200	35	F	UL3398	AWG26	6000	2.57 × 10 ⁻⁶	200	40000	0.060	0.020	0.40

Dimensions (Brake)



Model	Size	Radial direction dimensions										Axial direction dimensions			Rotor hub machining dimensions		
		A	r	B	C	D	d max.	□ F	S	V	H	K	N	a	L	D2	□ F2
BXR-015-10LE	015	26	R0.5	22	7	12	6	8	4.3	2.3	9.5 ~ 10.0	14.0	7.0	0.1	4 or more	10 ⁰ _{-0.1}	8 ⁰ _{-0.07}
BXR-020-10LE	020	32	R0.5	28	9	16	8	12	5.0	2.3	9.5 ~ 10.0	14.0	7.0	0.1	4 or more	14 ⁰ _{-0.1}	12 ⁰ _{-0.07}
BXR-025-10LE	025	39	R0.5	33	9	18	8	12	5.5	3.0	9.5 ~ 10.0	14.0	7.0	0.1	4 or more	14 ⁰ _{-0.1}	12 ⁰ _{-0.07}
BXR-035-10LE	035	48	R0.5	42	15	28	14	19	5.5	3.0	9.5 ~ 10.0	14.0	7.0	0.1	4 or more	23 ⁰ _{-0.1}	19 ⁰ _{-0.07}
BXR-040-10LE	040	56	R0.5	50	15	27	14	19	6.5	3.4	9.9 ~ 10.4	14.5	7.4	0.1	4 or more	23 ⁰ _{-0.1}	19 ⁰ _{-0.07}
BXR-050-10LE	050	71	R0.5	65	22	37	20	25	8.0	4.4	14.0 ~ 14.4	19.0	10.5	0.1	4.5 or more	31 ⁰ _{-0.1}	25 ⁰ _{-0.07}

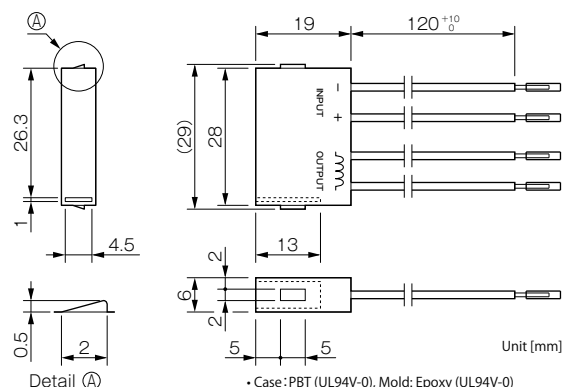
Unit [mm]

Specifications (Controller)

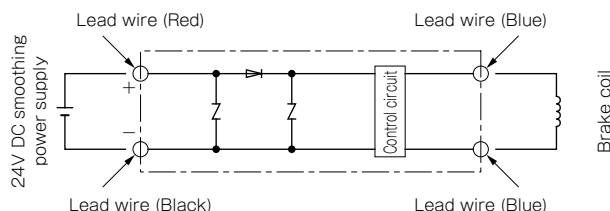
Model	BEM-24ESN7-120N
Input voltage	24V DC $\pm$ 10% smoothing power supply
Output voltage	Initial: 24V DC (0.2 sec.) Constant: 7V DC ($\pm$ 10%), PWM control *When the input voltage is 21V DC, the output voltage is cut off.
Max. output current	1.0 A DC (ambient temp.: 20 °C), 0.8 A DC (ambient temp.: 60 °C)
Insulating resistance	500V DC, 100 M Ω with Megger (input/output – between terminal and case)
Dielectric strength voltage	1000V AC, 50/60 Hz, 1 min. (input/output – between terminal and case)
Ambient environment	-20 to 60 °C, 5 to 95% RH, no condensation/freezing
Mass	0.02 kg

Lead wire	Function	Description	Specification
Red	Input (+)	Connects the 24V DC smoothing power supply (+)	UL3398 AWG26
Black	Input (-)	Connects the 24V DC smoothing power supply (-)	UL3398 AWG26
Blue	Output	Connects the spring-actuated brake (either pole)	UL3398 AWG26
Blue	Output	Connects the spring-actuated brake (either pole)	UL3398 AWG26

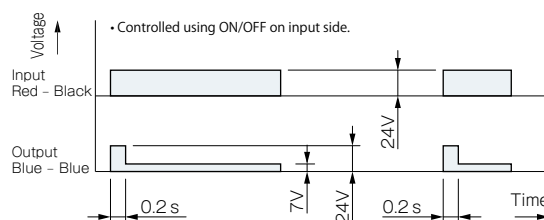
Dimensions (Controller)



Structure (Controller)

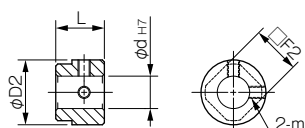


Timing Chart (Controller)



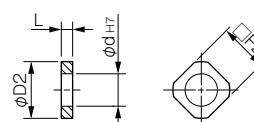
Options Rotor Hub

Set screw type (C)



Model	Size	L	D2	□ F2	m Nominal dia.	d Unit [mm]		
						Standard	Min.	Max.
BXR-015-10LE	015	10	10	8 $\frac{0}{-0.07}$	M2.5	5	4	5
BXR-020-10LE	020	10	14	12 $\frac{0}{-0.07}$	M3	8	5	8
BXR-025-10LE	025	10	16	12 $\frac{0}{-0.07}$	M3	8	5	8
BXR-035-10LE	035	12	26	19 $\frac{0}{-0.07}$	M4	14	8	14
BXR-040-10LE	040	12	26	19 $\frac{0}{-0.07}$	M4	14	11	14
BXR-050-10LE	050	15	35	25 $\frac{0}{-0.07}$	M5	20	15	20

Press fit type (P)



Model	Size	L	D2	□ F2	d Unit [mm]		
					Standard	Min.	Max.
BXR-015-10LE	015	4	9.58	8 $\frac{0}{-0.07}$	5	5	6
BXR-020-10LE	020	4	14	12 $\frac{0}{-0.07}$	8	7	8
BXR-025-10LE	025	4	14	12 $\frac{0}{-0.07}$	8	7	8
BXR-035-10LE	035	4	23	19 $\frac{0}{-0.07}$	14	9	14
BXR-040-10LE	040	4	23	19 $\frac{0}{-0.07}$	14	11	14
BXR-050-10LE	050	4.5	31	25 $\frac{0}{-0.07}$	20	15	20

How to Place an Order

Brake
BXR-015-10LE-006-24V
 Size ———
 Controller set type ———
 Nominal static friction torque
 (3-digit number listed in the specifications tables) ———
 Voltage ———

Hub
BXR-015-10LE-C5-Hub
 Size ———
 Controller set type ———
 Bore diameter
 (dimension symbol: d) ———
 Option (Rotor Hub)
 Blank: Without rotor hub
 C: Set screw type
 P: Press fit type