

# ERC3-RA4C

● Rod type

● Actuator Width 45mm

Model Specification Items

**ERC3-RA4C-I-42P**

Series — Type — Encoder type — Motor type — Lead — Stroke — I/O type — Cable length — Controller type — Option

I: Incremental specification  
 42P: Pulse motor, size 42□  
 20: 20mm  
 12: 12mm  
 6: 6mm  
 3: 3mm  
 50: 50mm  
 7  
 300: 300mm  
 (Can be set in 50-mm increments)  
 NP: PIO (NPN) type  
 PN: PIO (PNP) type  
 SE: SIO type  
 PLN: Pulse-train (NPN) type  
 PLP: Pulse-train (PNP) type  
 N: None P: 1m  
 S: 3 m M: 5m  
 X□□: Specified length  
 CN: CON type  
 MC: MEC type  
 B : Brake  
 NM : Non-motor side specification  
 ABU: Simple absolute specification  
 FL : Flange  
 FT : Foot bracket

\*Refer to P. 14 for the description of items constituting the model number.

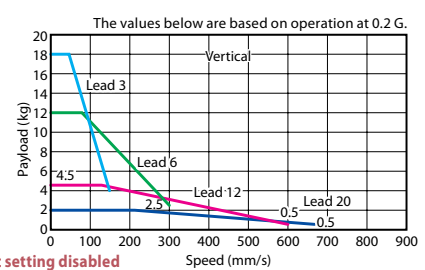
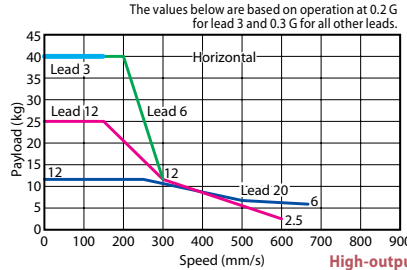
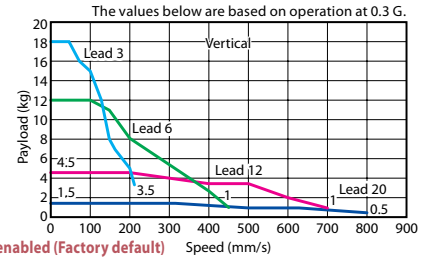
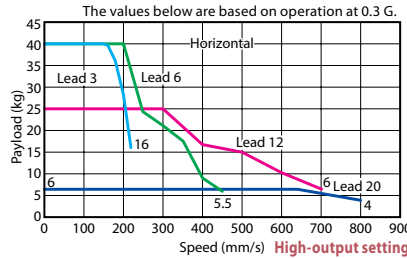


### Correlation diagrams of Speed and Payload

With the ERC3 series, due to the characteristics of the pulse motor, payload decreases as the speed increases. Use the chart below to confirm that the desired speed and payload requirements are met.

**POINT** Notes on selection

If the high-output setting is enabled (factory default), the duty must be limited. (Refer to P. 16.) If the high-output setting is disabled, the payload and maximum speed become lower, but the actuator can be used at a duty of 100%. Refer to the operation manual for information on how to change the high-output setting. Refer to P. 26 for the payload at each speed/acceleration when the high-output setting is enabled. For other cautionary items, refer to "Explanations of/Cautionary Notes on Items Specified in Catalog (P. 15)."



### Actuator Specifications (High-output Setting Enabled)

**Leads and Payloads** (Note 1) Take caution that the maximum payload decreases as the speed increases.

Model number	Lead (mm)	Maximum payload (Note 1)		Maximum push force (N)	Stroke (mm)
		Horizontal (kg)	Vertical (kg)		
ERC3-RA4C-I-42P-20-①-②-③-④	20	6	1.5	56	50~300 (every 50 mm)
ERC3-RA4C-I-42P-12-①-②-③-④	12	25	4.5	93	
ERC3-RA4C-I-42P-6-①-②-③-④	6	40	12	185	
ERC3-RA4C-I-42P-3-①-②-③-④	3	40	18	370	

**Stroke and Maximum Speed**

Stroke Lead	50~200 (every 50mm)	250 (mm)	300 (mm)
	20	800	
12	700	695	485
6	450	345	240
3	225	170	120

Legend ① Stroke ② I/O type ③ Cable length ④ Option

(Unit: mm/s)

**① Stroke**

Stroke (mm)	Standard price
50	—
100	—
150	—
200	—
250	—
300	—

**③ Cable length**

Type	Cable symbol	Standard price	
		PIO type	SIO type
Standard type (Robot cable)	P (1m)	—	—
	S (3m)	—	—
	M (5m)	—	—
Special length	X06(6m)~X10(10m)	—	—

\*Refer to P. 36 for maintenance cables.

**④ Options**

Name	Option code	See page	Standard price
Brake	B	→P15	—
Non-motor side specification	NM	→P15	—
Simple absolute specification	ABU	→P15	—(*)
Flange	FL	→P15	—
Foot bracket	FT	→P15	—

(\*) If the simple absolute specification is selected, the separately sold PIO converter of simple absolute specification (with battery) is required.

