



# Spring-Applied Electrically Released ERX Brakes For Industrial Applications



## THE WARNER ELECTRIC ADVANTAGE

Warner Electric is a global leader in developing innovative electromagnetic clutch and brake solutions. Warner Electric engineers utilize the latest materials and manufacturing technologies to design long-life and easy-to-use clutches and brakes for improved accuracy and reliability. We pride ourselves on customer service. With employees based around the world, we are able to design, manufacture, and quickly deliver high-quality products across various global locations.

We manufacture a full line of products to solve your motion control needs: -power-on and spring-applied friction clutches and brakes, motor brakes, controls, and moment of inertia measuring equipment.

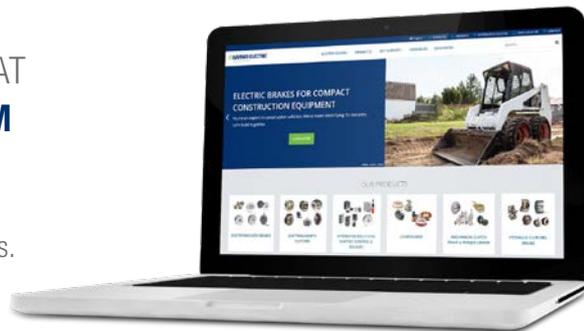
Warner Electric engineers excel in customizing solutions that meet our OEM's unique needs. Each of our standard catalog clutches and brakes can be adapted to meet a wide variety of applications. Put our engineering to the test and contact Warner Electric today!

**At Warner Electric, we provide solutions!**



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## SPRING-APPLIED ELECTRICALLY RELEASED ERX BRAKES

- Torque range from 5 to 800 Nm
- Single or Double brake version
- Easy installation
- Indoor application
- Non-Sticking friction material
- CE / UL / CSA Approved
- IP54 Option
- Limited Estop/Wear Capable
- Manual Release
- Configurable (Modular)
- Brake State Detection



### Applications



Wind Turbines



Industrial Motors



Cranes



Chain Hoists

## FEATURES

The ERX brakes is a spring-applied, power-off electromagnetic brake range designed for parking and holding applications. The design also offers emergency stop capabilities.

With our three friction material options, the ERX brake can be configured to meet specific application requirements, e.g., speed, energy, or torque. Several other options are available to customize the brake design for specific applications.

Voltage	Single voltage as standard (24V, 103.5V, 180V, 207V, 225V)
Magnet Insulation	Class F – 155°C
Ambient Temperature Range	-25 to 40°C
Duty Cycle	100% energized
Torque Range	5 to 800 Nm
Options	Hand lever release, dust cover, and double brake or a combination
Certifications	CE / UL / CSA approved
Note	<ul style="list-style-type: none"> <li>• For dry use</li> <li>• Indoor application</li> <li>• Non-Sticking friction material</li> </ul>



## Warner Electric Sensor (WES)

This new contactless sensor replaces the mechanical micro-switch brake status detection. It outmatches electromechanical solutions in both accuracy and lifespan over a wider range of temperature. It has less than 0.05 mm hysteresis between the full range of operating temperatures (-40°C/105°C).

Please refer to our WES technical data sheet (P-8692-WE) for more information or contact Warner Electric.



## Applications



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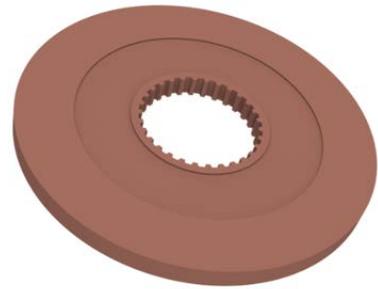


Chain Hoists

# FRICTION MATERIAL TORQUE DATA

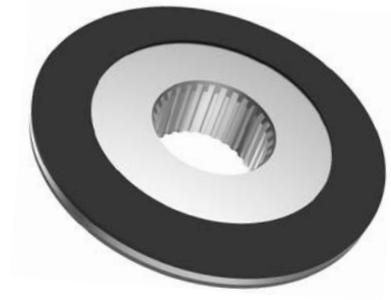
## Monobloc Friction (ST)

Monobloc	Torque up to speed *		Max energy allowed per braking up to speed [Joule]
	[Nm]	[rpm]	
ERX 5	5	5000	2000
ERX 10	10	3500	3000
ERX 20	20	2500	4000
ERX 35	35	2000	8000
ERX 60	60	2000	12000



## High Torque Friction (HT)

Monobloc	Torque up to speed *		Max energy allowed per braking up to speed [Joule]
	[Nm]	[rpm]	
ERX 5	8	2500	800
ERX 10	15	2000	1200
ERX 20	30	1700	2000
ERX 35	50	1400	3500
ERX 60	75	1200	6000
ERX 100	130	1200	6000
ERX 200	250	1000	7500
ERX 300	400	800	10000
ERX 600	800	600	10000



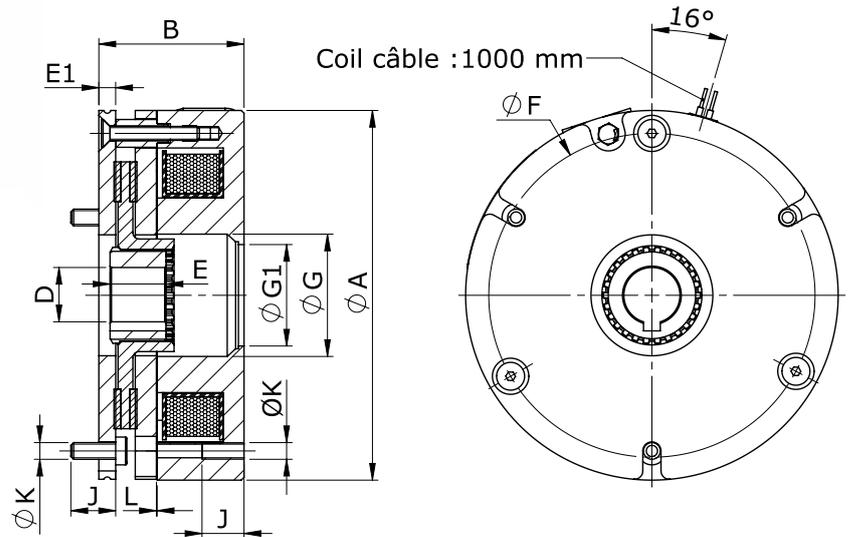
## High Energy Friction (HS)

Monobloc	Torque up to speed *		Max energy allowed per braking up to speed [Joule]
	[Nm]	[rpm]	
ERX 5	5	7000	3000
ERX 10	10	5500	5000
ERX 20	20	4600	8000
ERX 35	35	3800	12000
ERX 60	60	3500	16000
ERX 100	70	3000	20000
ERX 200	150	2800	30000
ERX 300	200	2200	40000
ERX 600	575	1900	40000



\* Please contact us if the speed of your application exceeds the specified speed. Our engineers will find a solution for you.

## DIMENSIONS



### Dimensions

Brake	ØA [mm]	B [mm]	ØD H7 [mm]	E [mm]	E1 [mm]	ØF [mm]	ØG [mm]	ØG1 [mm]	J [mm]	ØK [mm]	L ±0.1 [mm]	L Max [mm]
ERX 05	86	53	12H7	18	5	72	26	25,5	10	3xM4	0,35	0,5
ERX 10	98	54	15H7	20	6	90	31	30,5	10	3xM5	0,35	0,5
ERX 20	133	52	20H7	20	7	112	43,5	36,5	10	3xM5	0,35	0,5
ERX 35	153	52	25H7	25	7	132	51	50,5	10	3xM6	0,35	0,5
ERX 60	164	58	30H7	30	4	145	59	52	14	3xM8	0,35	0,5
ERX 100	166	86	30	30	10	145	59	-	14	3xM8	0,25	0,6
ERX 200	194	92	40	30	10	170	70	-	18	3xM8	0,25	0,6
ERX 300	234	89	40	30	10	214	80	-	21	6xM8	0,25	0,6
ERX 600	275	112	45	68	10	250	98	-	21	3xM12	0,25	0,6

## AVAILABLE OPTIONS

### Hand-Lever

For manual release



### “WES”

For monitoring brake status



### Dust Cover Kit

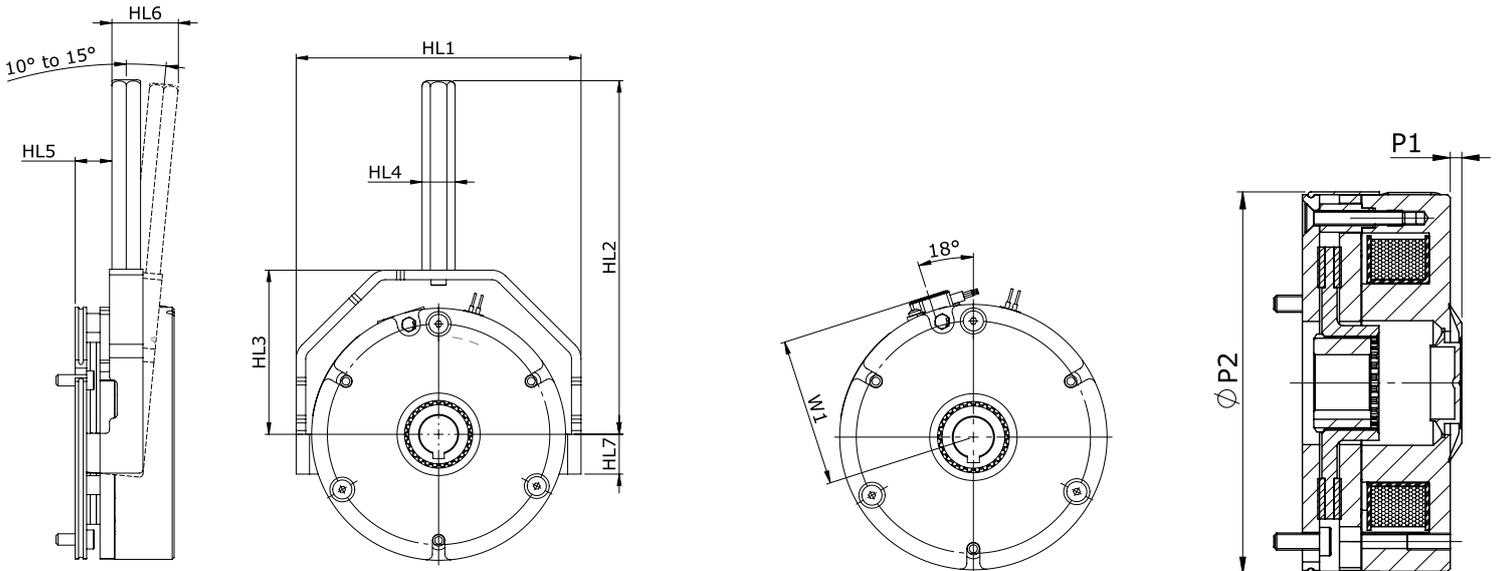
To prevent dust pollution



### Double Brake

For applications requiring redundancy





### Hand Release Lever Option

Brake	HL1 [mm]	HL2 [mm]	HL3 [mm]	HL4 [mm]	HL5 [mm]	HL6 [mm]	HL7 [mm]
ERX 05	98	164	64	17	12	37	12
ERX 10	112	172	72	17	14	53	16
ERX 20	149,2	187	87	17	19	35	21
ERX 35	168	194	94	17	20	43	15
ERX 60	182	251	101	17	22	42	20
ERX 100	212	300	111	12	50	80	15
ERX 200	240	368	121	12	52	98	15
ERX 300	279	437	140	12	54	117	15
ERX 600	342	674	175	12	34	180	15

### “WES” Option

Brake	W1 [mm]
ERX 05	51
ERX 10	58
ERX 20	73.2
ERX 35	81.1
ERX 60	86.5
ERX 100	91
ERX 200	105
ERX 300	125
ERX 600	135

### Dust Cover Option

Brake	P1 [mm]	ØP2 [mm]
ERX 05	2,2	86
ERX 10	2,4	100
ERX 20	4	135
ERX 35	2,4	154
ERX 60	1,8	166
ERX 100	7	169
ERX 200	7	197
ERX 300	7	237
ERX 600	7	278

## HOW TO ORDER WITH OUR CONFIGURATOR

ERX	-V	-F	-HB	-L	-P	-NO	-D	-HS
Brake Size	Voltage (VDC)	Friction	Hub Bore	Lever Option	Protection Option	Double Option	WES Option	
05	24	ST Monobloc*	Specify Hub Bore Size in mm	0 No	0 No	0 No	0 No option	
10	103	HT High Torque		1 Yes	1 Yes	1 Yes	1 N PN	
20	180						2 NO/NC	
35	207	HS High Speed					3 NC + Analog	
60	225							

\*Monobloc friction is not available from size 100 to size 600

### Configuration Example:

**ERX05-V024-FST-HB10-L0-P0-N0-D0-HS1**

Brake Size 05, Voltage 24V with monobloc friction material, Hub bore diameter 10 with WES detection



## Warner Electric Facilities

### North America

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New Hartford, CT 06057 - USA  
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*Electromagnetic Clutches  
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*Precision Electric Coils and  
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