

# POWERLINK Torque Sensor and Torque Meter

*Model selection and dimensions*



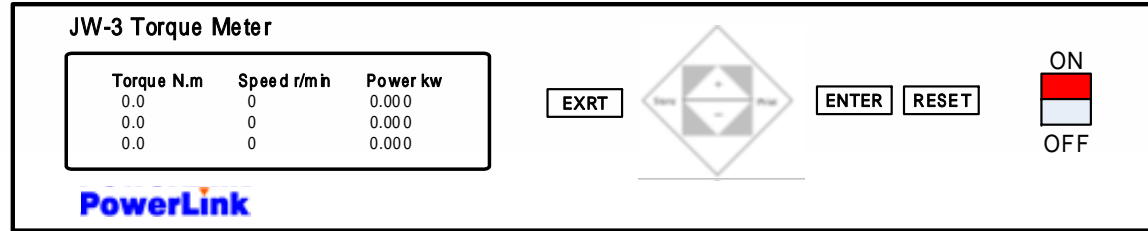
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# POWERLINK JC series Torque Sensor



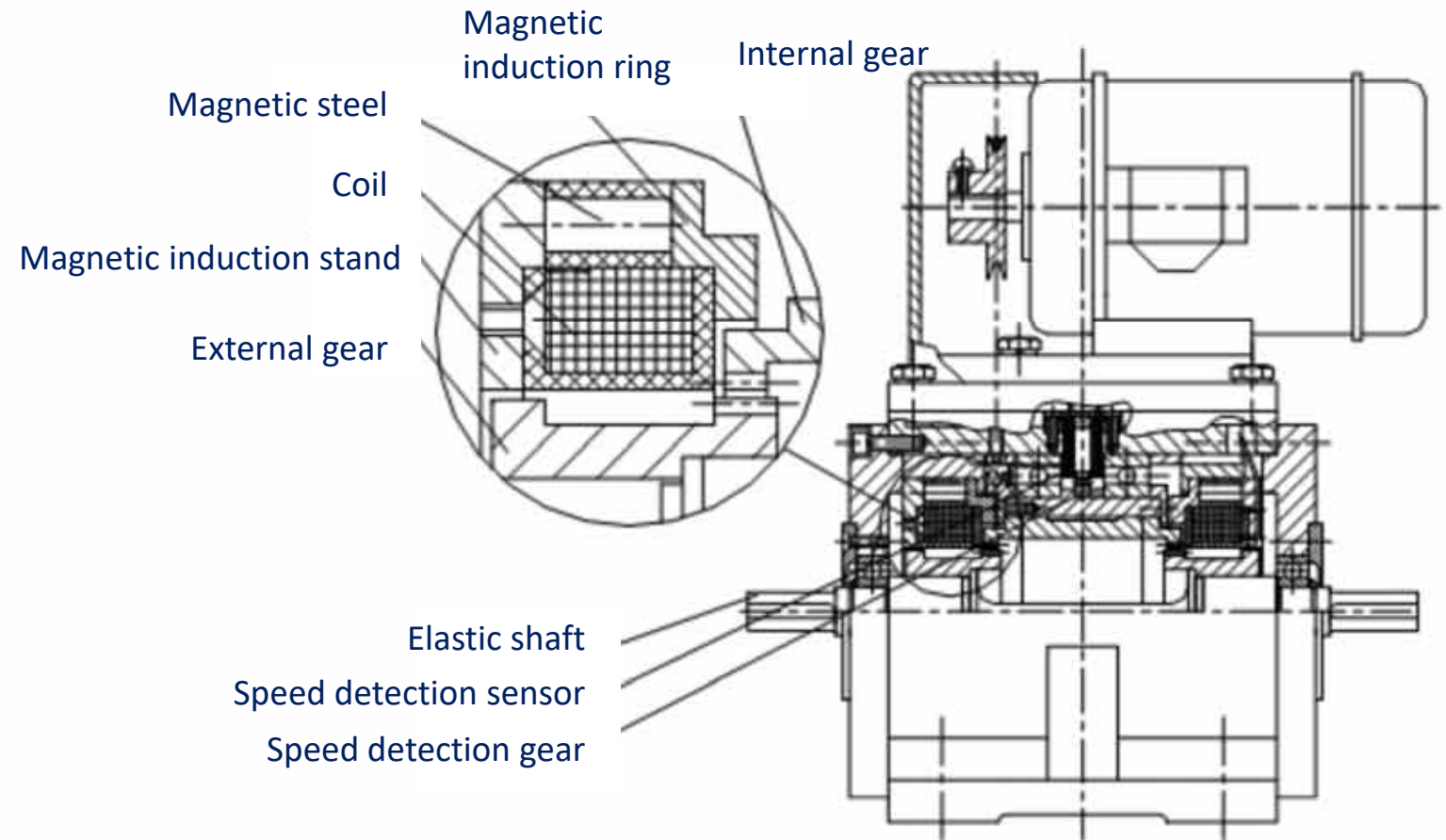
Model	Rated torque	Rated speed	High-speed version - Rated speed	
JC0-0.5	0.5 Nm	4,000 rpm	-	
JC0-1	1 Nm	6,000 rpm		
JC0-2	2 Nm			
JC0-5	5 Nm		12,000 rpm	
JC0-10	10 Nm			
JC0-20	20 Nm			
JC1A-50	50 Nm		8,000/ 12,000 rpm	
JC1A-100	100 Nm			
JC1A-200	200 Nm			
JC2C-500	500 Nm		4,000 rpm	8,000/ 10,000/ 12,000 rpm
JC2C-1000	1,000 Nm			
JC2C-2000	2,000 Nm			
JC3A-5000	5,000 Nm	3,000 rpm	8,000/ 12,000 rpm	
JC3A-10000	10,000 Nm			
JC3A-20000	20,000 Nm			
JC3A-30000	30,000 Nm			
JC4A-40000	40,000 Nm	2,000 rpm	-	
JC4A-50000	50,000 Nm			
JC4A-60000	60,000 Nm			
JC4A-80000	80,000 Nm	1,500 rpm		
JC4A-100000	100,000 Nm			
JC4A-120000	120,000 Nm			

# Major technical specifications of JW-3 Torque Meter



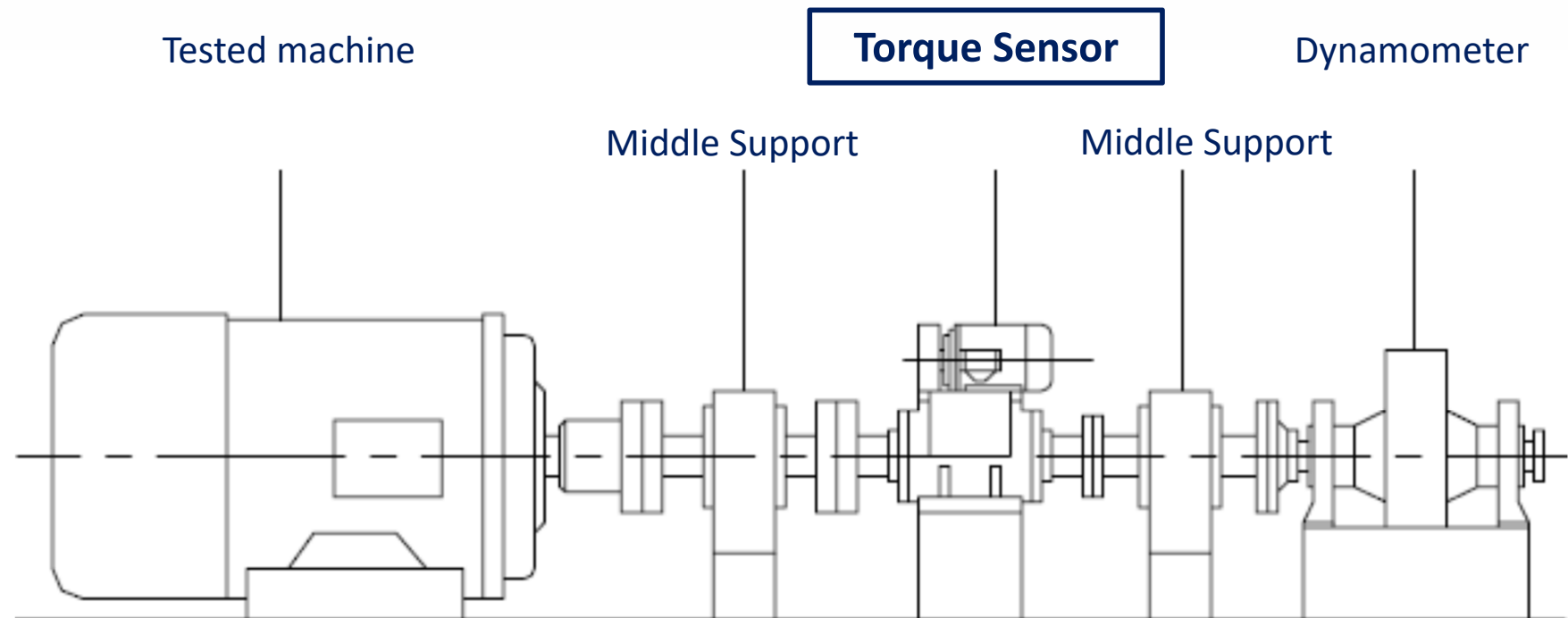
Parameters	Figures
Signal amplitude	: Effective value 0.2V - 20V AC
Frequency range	: 2Hz-20kHz
Input Impedance	: 10k
Sampling time	: 1ms-3s
Range	: Any
Measurement accuracy	: $\pm 0.1\%$ F.S or $\pm 0.2\%$ F.S

# Mechanical Structural Schematic Diagram of Torque Sensor



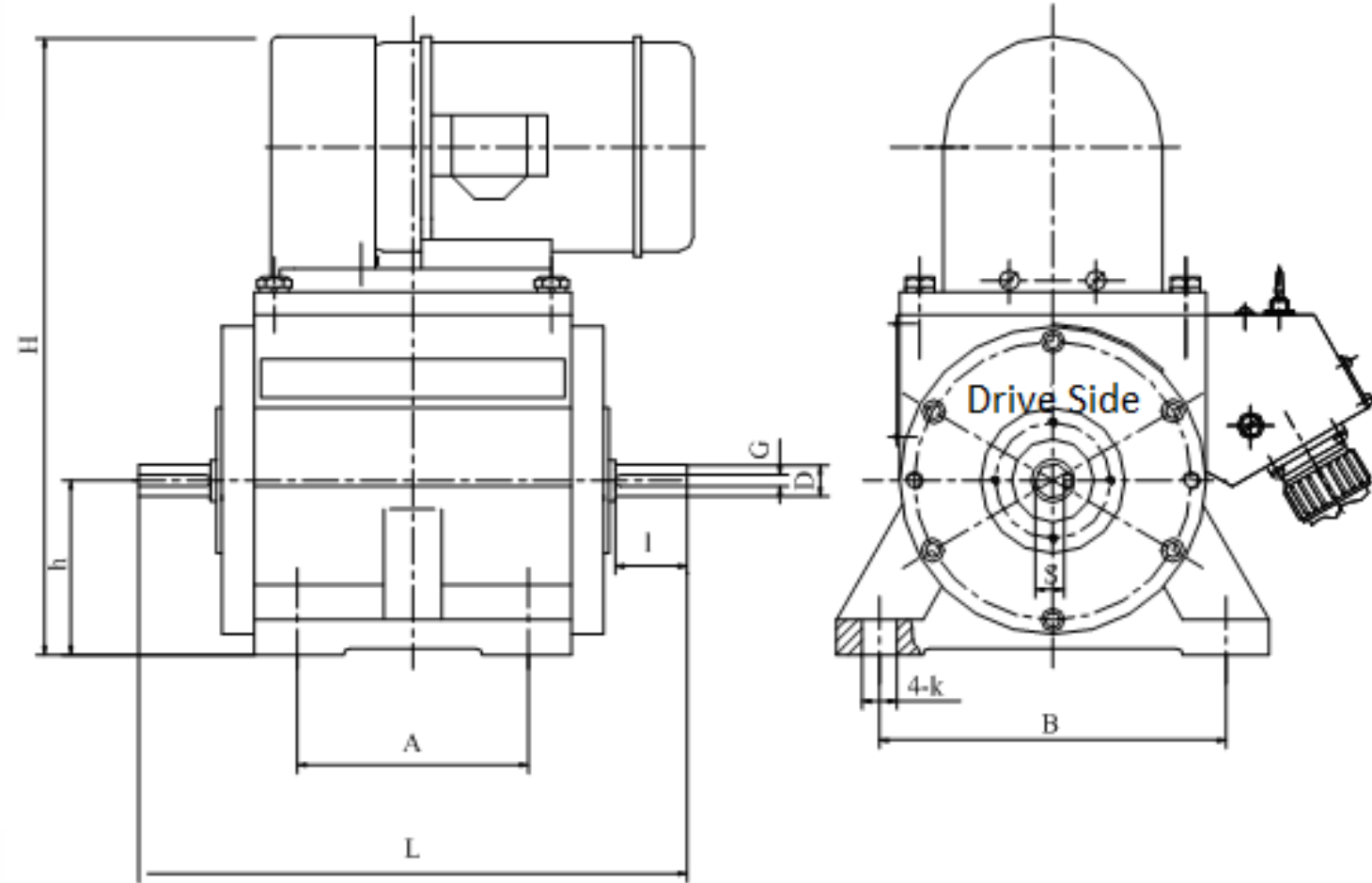


## Basic Installation Schematic Diagram of Torque Sensor





## JC series Torque Sensor Mounting Dimensions



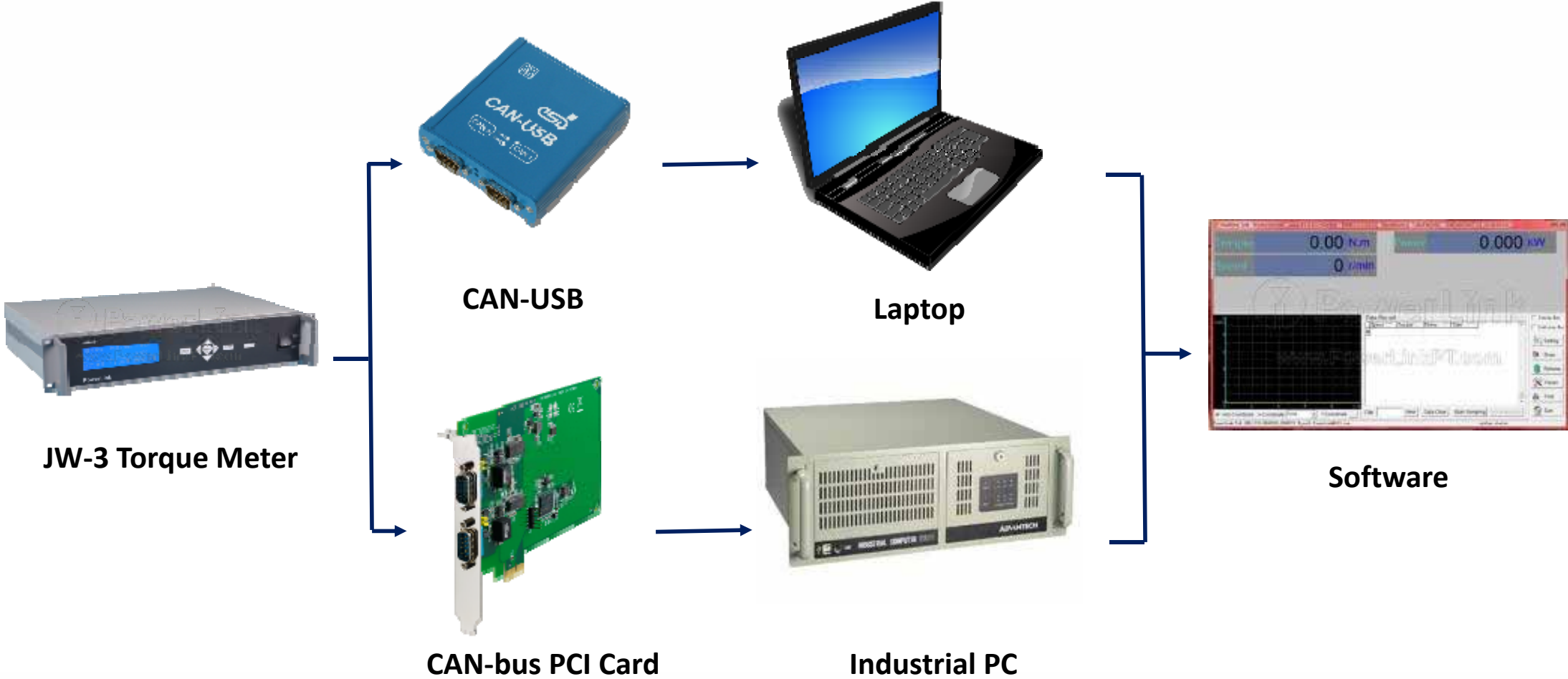


## JC series Torque Sensor Mounting Dimensions Table

Model	A	B	D	G	L	H	h	I	S	K		
JC0-0.5 to JC0-2	80	120	8	3	174	222	60	17	6	12		
JC0-5			12	4				190	25		9.5	
JC0-10, JC0-20			26	8	360				293		85	55
JC1A-50, JC1A-100	140	180	26	8	390	293	85	55	21.5	14		
JC1A-200					420						110	85
JC2C-500	170	200	46	14	490	110	85	106	40.2	18		
JC2C-1000, JC2C-2000					520			390			130	60
JC3A-5000	220	230	102	**	580	90						
JC3A-10000					660	130						
JC3A-20000					760	180						
JC3A-30000					920	100						
JC4A-40000	400	380	157		1020	570	210	150		**		
JC4A-50000					1080			180				
JC4A-60000											653	58
JC4A-80000												
JC4A-100000					1080			180				
JC4A-120000	1080	180										
JC3A-5000 (High speed)	220	230	95		653	390	130	58		**		
JC3A-10000 (High speed)					693			78				
JC3A-20000 (High speed)											693	78

\*\* Involute or rectangular splines

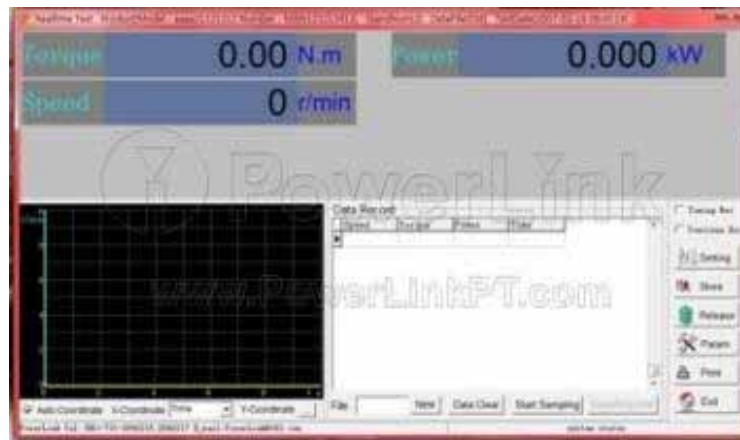
# Torque and Speed Test Software (optional)





## Torque and Speed Test Software (optional)

JW-3 Torque Meter Software runs under Windows environment for motor and water pump testing with data processing ability. Its main functions and technical features include:

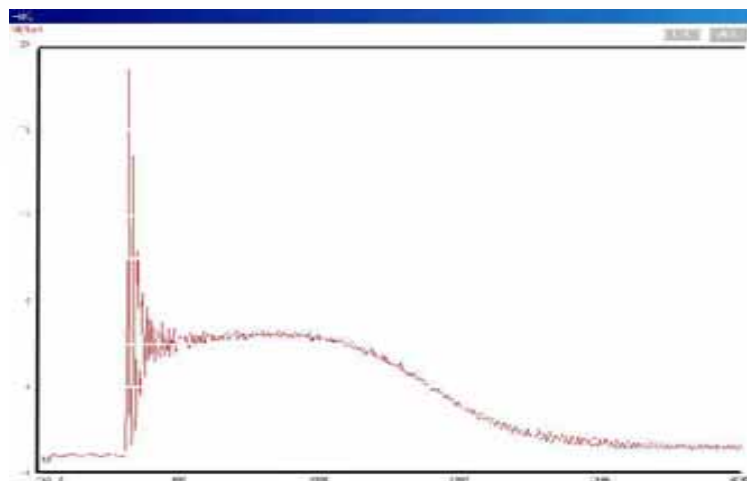


- Add, delete and edit measurement parameters
- Adjust parameter display interface
- Real-time acquisition and display of torque, speed, power, etc.
- Real-time rendering trend curve of any measured parameters
- The test data can be consulted and modified
- Flexible generation and printing of test data reports
- Automatically generating a variety of test characteristic curves

## Torque and Speed Test Software (optional)

### Torque-speed curve for no-load startup test

If the test object inertia is large, the torque-speed curve can be tested using no-load start method. In this case, the sampling time should be set a little faster (1-20ms) for 1000 to 2000 acquisition points. The method is suitable for users who need to study the transient process of motor starting and large motors.



### Torque-speed curve for stall to release (or no-load to stall)

First, the motor is in stalled state. The stall state is released in about 100ms. The process from motor stalling to no-load running state will be fast acquired by JW-3. The method is suitable for the factory, especially small motor user, for the torque-speed curve test requirement.

