

BYWZ5 series explosion-proof electric hydraulic brake

Product Introduction:

The BYWZ5 series explosion-proof electric hydraulic brake is mainly used for mechanical braking of mechanical drive devices such as lifting, transportation, metallurgy, mining, ports, and construction, its explosion-proof performance complies with the provisions of GB3836.1-2000 "Electrical Equipment for Explosive Gas Environments Part 1 General Requirements" and GB3836.2-2000 "Electrical Equipment for Explosive Gas Environments Part 2 Explosion proof Type" d ". The explosion-proof signs are "ExdI" and "ExdIIBT4", which are respectively used in coal mines and IIA and IIB level places where explosive mixtures of combustible gases and air are formed in temperature groups T1-T4. This series of products features smooth braking, safety and reliability, easy maintenance, energy-saving, noiseless, long service life, stable friction material performance, adjustable braking torque, and convenient replacement of brake pads. In addition, various additional devices can be installed according to user requirements to meet different needs.

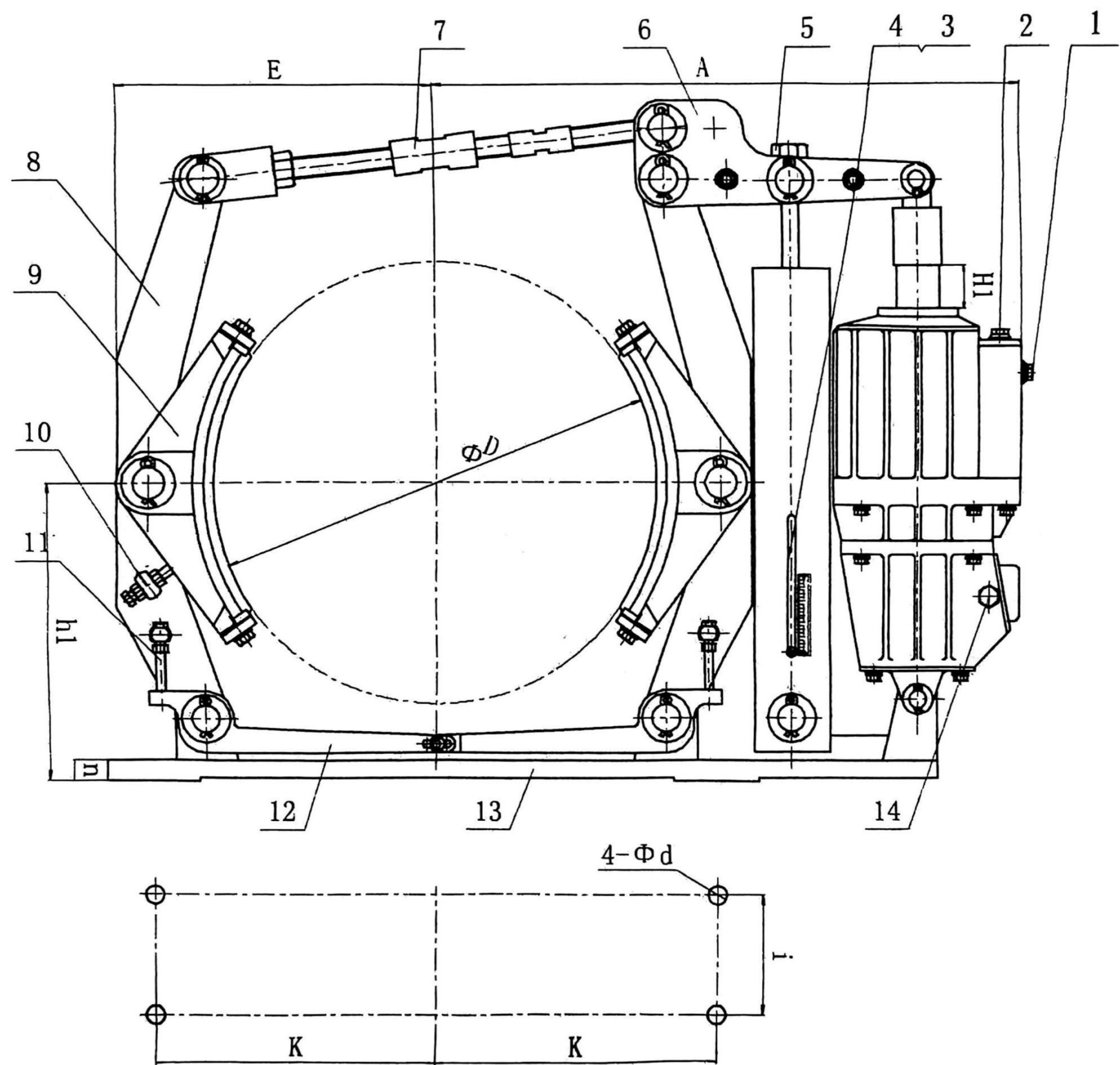
Usage conditions:

- The temperature of the surrounding medium shall not exceed +40 °C and shall not be lower than -20 °C.
- The altitude shall not exceed 1000m.
- The average maximum relative humidity of the installation location in the wettest month shall not exceed 90%, and the average minimum temperature of that month shall not exceed +25 °C . Condensation on the surface of the product due to humidity changes is allowed.
- The pollution of the surrounding environment is allowed to be level 3.
- Generally used for three-phase AC power supply 127V~1140V/50HZ (60HZ).

Working Principle:

The BYWZ5 series electric hydraulic block brake consists of a brake frame and a matching explosion-proof electric hydraulic thruster. When powered on, the electric hydraulic actuator works, causing its push rod to quickly rise and release the brake pad through lever action; When the power is cut off, the push rod of the electric hydraulic actuator rapidly descends under the action of the brake spring force, and the brake pad is closed (holding brake) through the lever action.

Structural diagram



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|---------------------------|--------------------|------------------------|---|---------------|----------|
| 1.Overflow plug | 2.oil filling plug | 3. spring seat | 4.brake spring | 5. spring rod | 6. lever |
| 7. rod | 8. brake arm | 9. Brake tile | 10. brake tile position adjustment device | 11. bolt | |
| 12. equal backlash device | 13. base | 14. pusher wiring hole | | | |

Data parameter table

Model	D	A	R	E	H	h1	i	K	n
BYWZ5-160/23	160	410	7	135	395	132	55	130	8
BYWZ5-200/23	200	468	7	167	490	160	55	145	10
BYWZ5-200/30	200	468	7	167	490	160	55	145	10
BYWZ5-250/23	250	533	9	198	550	190	65	180	12
BYWZ5-250/30	250	530	9	198	550	190	65	180	12
BYWZ5-250/50	250	570	9	198	550	190	65	180	12
BYWZ5-300/23	300	570	9	252	580	225	80	220	12
BYWZ5-300/30	300	570	9	252	580	225	80	220	12
BYWZ5-300/50	300	600	9	252	580	225	80	220	12
BYWZ5-300/80	300	600	9	252	580	225	80	220	12
BYWZ5-315/23	315	570	9	252	580	225	80	220	12
BYWZ5-315/30	315	570	9	252	580	225	80	220	12
BYWZ5-315/50	315	600	9	252	580	225	80	220	12
BYWZ5-315/80	315	600	9	252	580	225	80	220	12
BYWZ5-400/50	400	707	11	302	715	280	100	270	14
BYWZ5-400/80	400	707	11	302	715	280	100	270	14
BYWZ5-400/121	400	698	11	302	775	280	100	270	14
BYWZ5-500/80	500	806	11	380	840	340	130	325	16
BYWZ5-500/121	500	797	11	380	840	340	130	325	16
BYWZ5-500/201	500	797	11	380	840	340	130	325	16
BYWZ5-600/121	600	925	13	465	1025	425	170	400	20
BYWZ5-600/201	600	925	13	465	1025	425	170	400	20
BYWZ5-600/301	600	925	13	465	1025	425	170	400	20
BYWZ5-630/121	630	925	13	465	1025	425	170	400	20
BYWZ5-630/201	630	925	13	465	1025	425	170	400	20
BYWZ5-630/301	630	925	13	465	1025	425	170	400	20
BYWZ5-700/201	700	960	13.5	514	1135	475	190	450	25
BYWZ5-700/301	700	960	13.5	514	1135	475	190	450	25
BYWZ5-710/201	710	960	13.5	514	1135	475	190	450	25
BYWZ5-710/301	710	960	13.5	514	1135	475	190	450	25

Brake model	Matching thrusters	Wheel diameter (mm)	Retreat distance ± 20% (mm)	Rated braking torque (Nm)	H1 (mm)	H1min (mm)	Weight (Kg)
BYWZ5-160/23	BEd23/5	160	0.8	50-180	10	5	30
BYWZ5-200/23	BEd23/5	200	0.8	112-224	10	5	35
BYWZ5-200/30	BEd30/5			140-315			38
BYWZ5-250/23	BEd23/5	250	1.0	140-224	10	5	42
BYWZ5-230/30	BEd30/5			180-315			45
BYWZ5-250/50	BEd50/6			315-500	15	5	50
BYWZ5-300/23	BEd23/5	300	1.0	180-260	10	5	70
BYWZ5-300/30	BEd30/5			250-320			70
BYWZ5-300/50	BEd50/6			400-600	15	5	75
BYWZ5-300/80	BEd80/6			630-750			80
BYWZ5-315/23	BEd23/5	315	1.0	180-280	10	5	70
BYWZ5-315/30	BEd30/5			250-400			70
BYWZ5-315/50	BEd50/6			400-630	15	5	75
BYWZ5-315/80	BEd80/6			630-1000			80
BYWZ5-400/50	BEd50/6	400	1.25	400-800	15	5	105
BYWZ5-400/80	BEd80/6			630-1250			110
BYWZ5-400/121	BEd121/6			1000-2000			125
BYWZ5-500/80	BEd80/6	500	1.25	800-1400	15	5	175
BYWZ5-500/121	BEd121/6			1120-2240			190
BYWZ5-500/201	BEd201/6			2000-3600			
BYWZ5-600/121	BEd121/6	600	1.6	1800-2600	15	5	300
BYWZ5-600/201	BEd201/6			2500-3700			300
BYWZ5-600/301	BEd301/6			4000-6000			305
BYWZ5-630/121	BEd121/6	630	1.6	1800-2800	15	5	300
BYWZ5-630/201	BEd201/6			2500-4000			300
BYWZ5-630/301	BEd301/6			4000-6300			305
BYWZ5-700/201	BEd201/6	700	1.6	3150-4800	15	5	420
BYWZ5-700/301	BEd301/6			5000-7700			425
BYWZ5-710/201	BEd201/6	710	1.6	3150-5000	15	5	420
BYWZ5-710/301	BEd301/6			5000-8000			425

Parameter table of brake matching thruster

Model	Thrust (N)	Stroke (mm)	rated power (W)	rated current A(380V)	Action time		Operating frequency (C/H)
					Rise S	Decline S	
BEd23/5	220	50	165	0.4	0.37	0.36	1500
BEd30/5	300	50	180	0.42	0.37	0.36	1500
BEd50/6	500	60	240	1.2	0.6	0.52	1500
BEd80/6	800	60	290	1.2	0.5	0.49	1500
BEd121/6	1250	60	365	1.2	0.54	0.50	1500
BEd201/6	2000	60	375	1.2	0.57	0.46	1500
BEd301/6	3000	60	445	1.3	0.74	0.44	1500