

SBD-A series safety brake

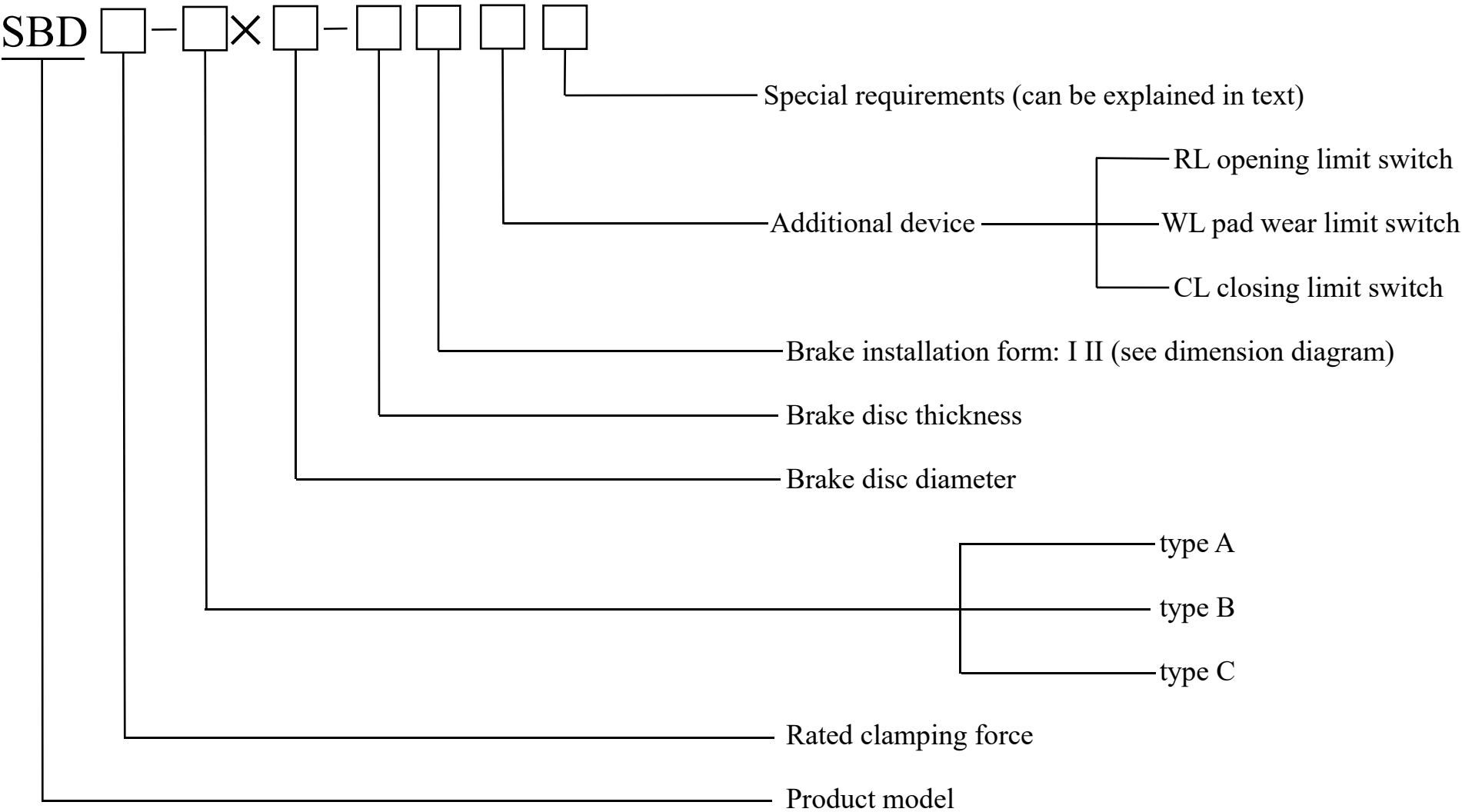
Application scope:

-Hydraulic safety (emergency) brake is a high-power braking device used on low-speed shafts (drum shafts), which can be widely used for emergency safety braking of low-speed shafts in large and medium-sized cranes, port loading and unloading machinery, and boom tilt mechanisms. The working brake and emergency safety brake of mining winches, hoists, and high-power inclined belt conveyors, the safety brake of cable car and cable crane drive mechanisms, and the safety (emergency) brake of low-speed shafts of lifting mechanisms for special cranes such as casting cranes.

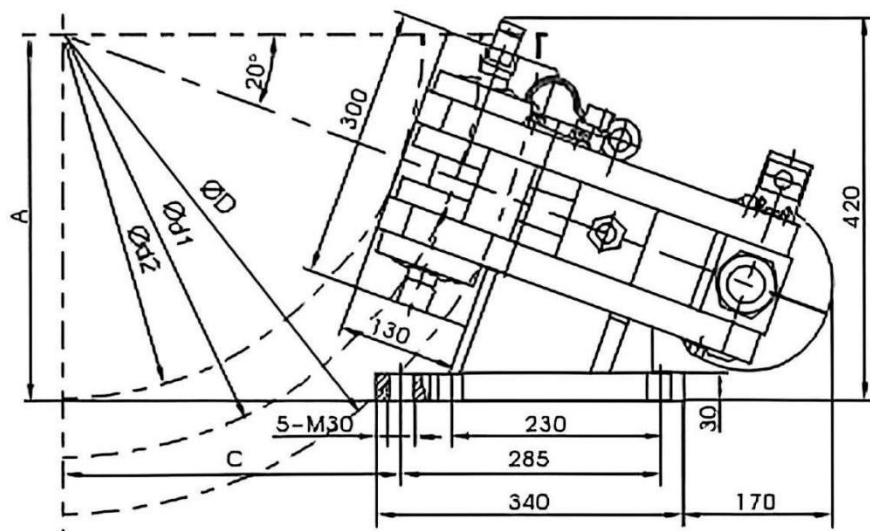
Main design features:

- Normally closed design, safe and reliable; Specially designed disc spring force braking requires additional hydraulic drive release device.
- Quick action and short closing (closing) time.
- It can be equipped with an opening limit switch and a pad wear limit switch, which can provide interlocking protection and fault display (when controlled by PLC).
- High performance asbestos free hard friction pad, stable friction coefficient, does not damage the brake disc, and is insensitive to water medium and salt spray (seawater).
- Reasonable sealing structure design and imported branded seals. Good effect and long lifespan.
- Flexible installation location, easy to use, adjust, and maintain.

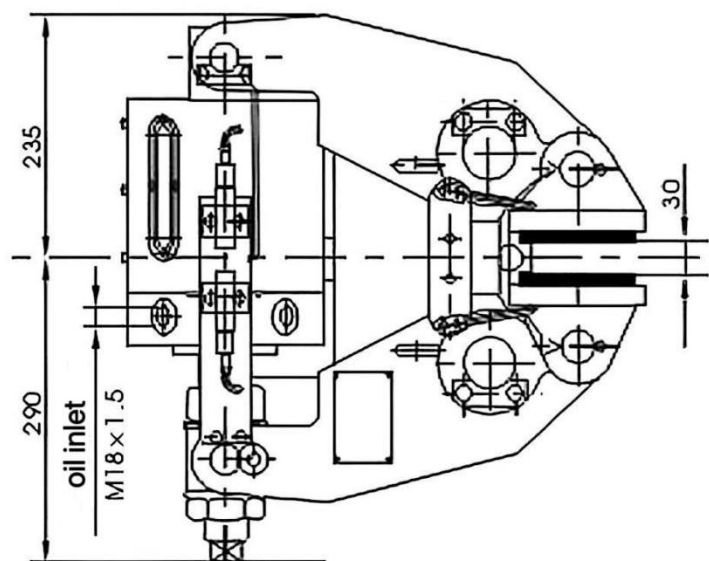
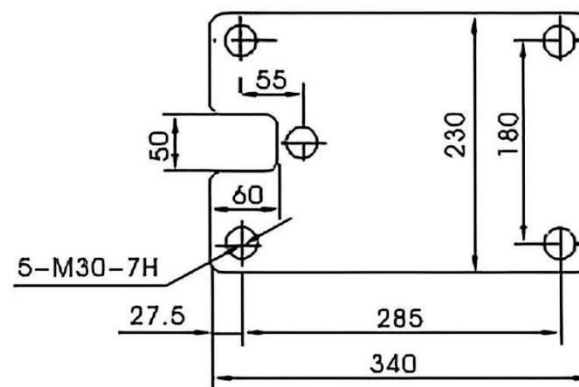
Model Meaning



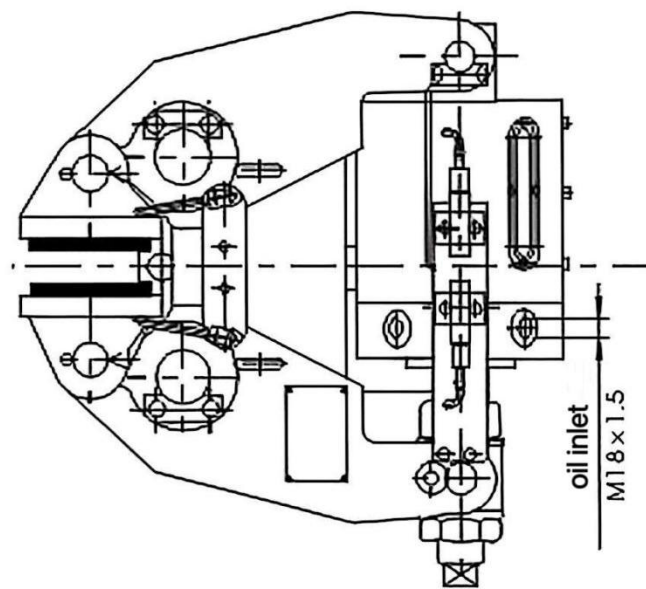
Appearance and installation dimensions



Bottom plate connection size

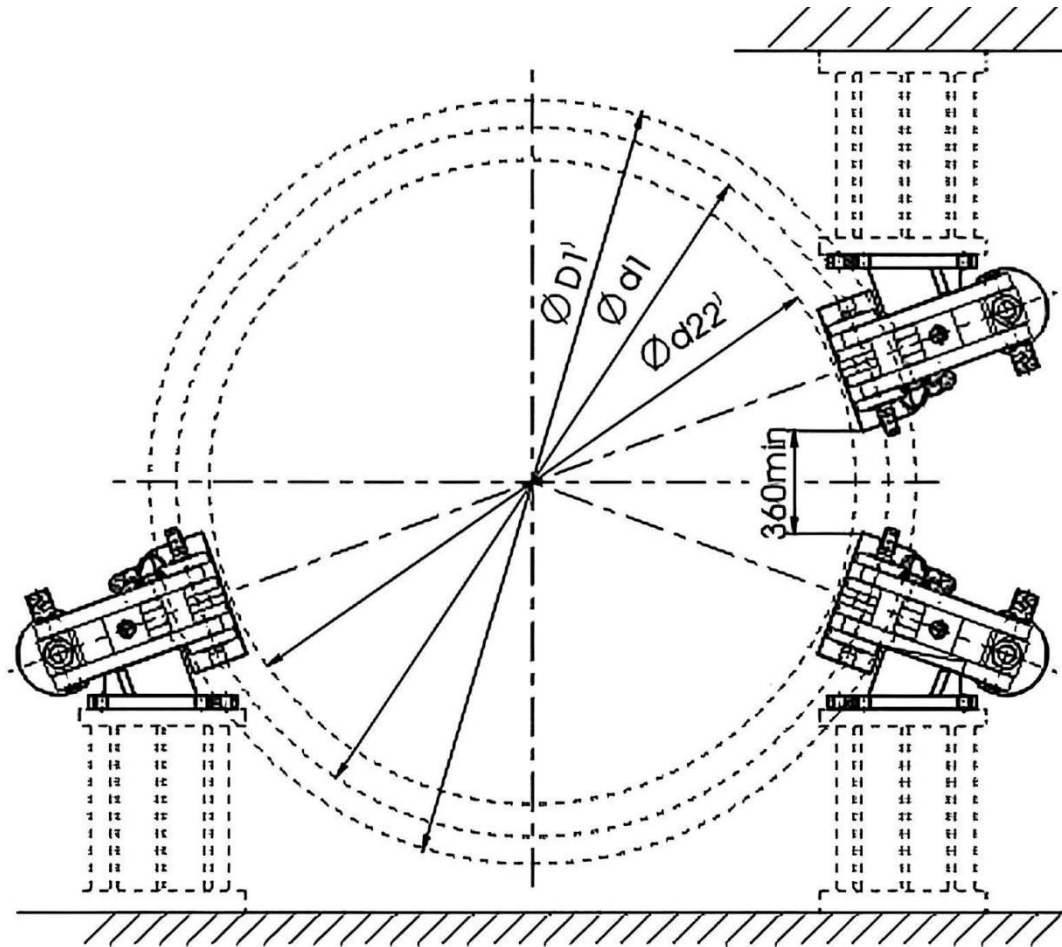


Installation form: Type II



Installation form: Type I

Installation diagram



Braking torque: $M = \mu \times d1 \times F$ (Nm)

In the formula: μ - friction coefficient calculation value $\mu = 0.35$

$d1$ - Calculate the friction diameter of the brake disc, $d1 = D - 130$ (mm)

F - total clamping force during braking (KN)

Note: 1) The diameter of the brake disc is used for diameters between 800 and 1800,

If you need other disc diameters, please contact us directly

2) $d2$ is the maximum allowable outer diameter of the drum or connecting hub, $d2 = D - 270$ (mm)

SBD-A series safety brake size and technical parameters

Product model	Total clamping force	Braking force	Working pressure of oil cylinder	Open valve oil volume	Opening gap	weight	A(mm)	C(mm)	d1(mm)	d2max (mm)	D(mm)
SBD100-A	100	72	70	70	0.75-1.5	195	0.171×ΦD+220	0.470×ΦD-127	ΦD-135	ΦD-127	Φ800≤ΦD ≤Φ1800
SBD125-A	125	90	90	90	0.75-1.5	195					
SBD160-A	160	115	110	110	0.75-1.25	195					
SBD200-A	200	144	100	100	0.75-1.5	235					
SBD250-A	250	180	120	120	0.75-1.25	235					

Note: SBD □-A series safety brake is the original model SBD series safety brake.