

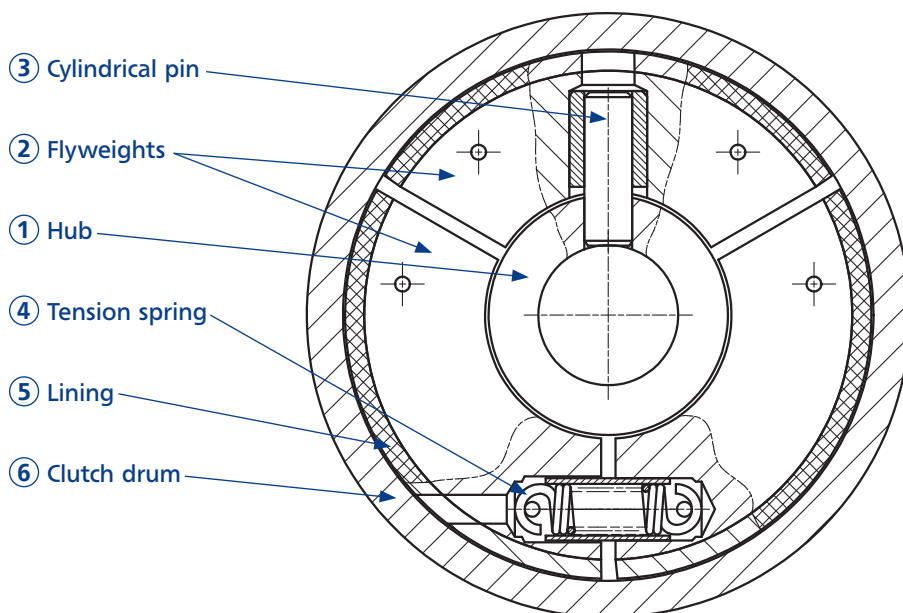
S-Type

Centrifugal clutches and brakes

Pin-guided clutch with three flyweights

Construction and mode of operation

The cylindrical hub ① carries three flyweights ② which are located by and can slide on cylindrical pins ③. Inside the flyweights, there are tension springs ④ which restrain neighbouring flyweights until centrifugal force overcomes the spring force. Then the flyweights lift from their seats and the linings ⑤ on the flyweights contact the inside diameter of the clutch drum ⑥. Friction between the linings and the clutch drum allows torque to be transmitted.



Advantages

In contrast to F-Type clutches, the linings of pin-guided clutches are permanently bonded to the flyweights instead of being mounted on loose carriers. The guide pins of W-Type clutches provide accurate guidance for the flyweights, which ensures quiet operation of the clutch.

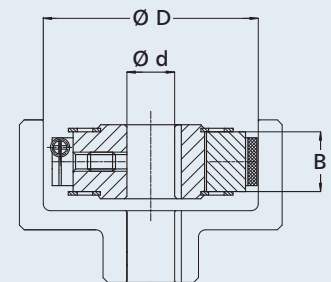
For this type of clutch, the performance factor for torque transmission is ca. 1.5.

Performance data and dimensions:

Size	D [mm]	B [mm] ¹⁾	d max. [mm]	Standard bore diameter d [mm] (inch) ²⁾	Md at nE 750 and nB 1500 [Nm]	Recommended motor power ³⁾ [kW]	Md at nE 1250 and nB 2500 [Nm]	Recommended motor power ³⁾ [kW]	Md at nE 1500 and nB 3000 [Nm]	Recommended motor power ³⁾ [kW]
04	80	25	24	15 (3/4 ; 5/8)	4.3	0.3	12	1.6	17.5	2.8
05	90	25	30	14; 30 (5/8)	7.5	0.6	21	2.8	31	4.9
06	100	25	24	20; 24; 28 (3/4; 7/8)	11	0.8	30	4.0	43	7.0
07	110	25	30	28; 30 (1)	15	1.2	45	6.0	64	10.0
08	125	25	40	20; 30 (1 1/2)	30	2.4	85	11.0	124	20.0
09	138	25	30	17; 30 (1; 1 1/8)	40	3.0	112	15.0	160	25.0
10	150	35	40	38 (1 1/8)	78	6.0	216	28.0	310	49.0

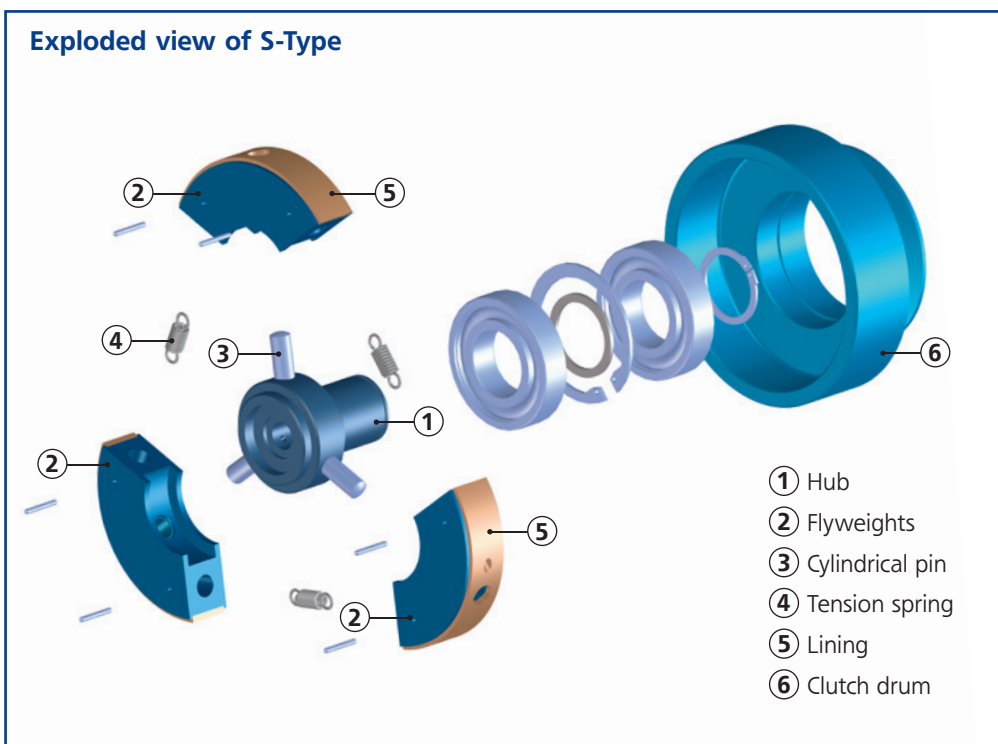
- 1) The transmitted power increases as the width B is increased.
- 2) Tapered bores and special dimensions can be manufactured on request.
- 3) Motor power is calculated using a safety factor of 2.
Final selection of the clutch should be carried out by SUCO!

d max. = max. bore dia.
Md = torque
nE = engagement speed
nB = operating speed



d = bore dia.
D = inside dia. of drum
B = flyweight width

Exploded view of S-Type



- ① Hub
- ② Flyweights
- ③ Cylindrical pin
- ④ Tension spring
- ⑤ Lining
- ⑥ Clutch drum