

Dial Train Limit Switch LZ



DITTELBACH UND KERZLER



- **Unrivalled high repeatability of the switch points**
- **Highest precision**
- **Absolut synchron snap action of all contacts**
- **Easiest adjustment of the switch points**
- **Direct opening**
- **Up to 200 Ampère**

This switch stores with his dial train (function please see below) the number of the rotations of the incoming shaft. If the number of rotations of the incoming shaft reaches 1 of the 2 possible, easy adjustable, limit positions, the incoming shaft is coupled direct 1:1 (this means: without gear reducing) to the switch shaft. This direct coupling effects the unique high repeatability of the adjusted switch point. And this switch shaft actuates the snap action mechanism, one snap action mechanism COMMON for ALL contacts. The advantage is the absolut synchron and simultaneously switching over of all contacts, even at lowest rotation speeds of the incoming shaft. For reliable safety applications the NC-contacts are actuated with a direct opening mechanism (positive drive).

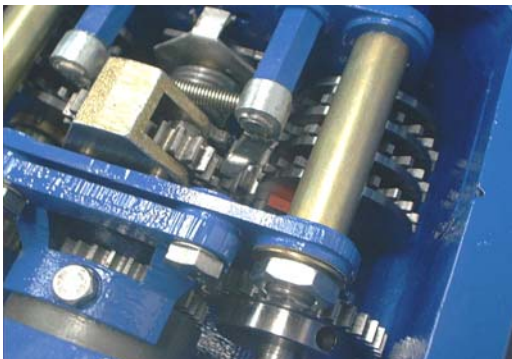
Each switch can be equipped per limit position with up to 6 contacts, each up to 200 Ampère. Free adjustable auxiliary current contacts, stepless adjustable independent from the 2 limit switch points, also within the overrun (slow-down path) are feasible additional.

2 different dial trains facilitate up to 99 rotations or 999 rotations of the incoming shaft (the range between the limit positions plus 2x slow down path).

The stable incoming shaft is ball-bearred for reliable long-life service. Due to this ball bearing the shaft butt can be charged with a great radial force arising out of a chain drive or gear wheel drive. The overdimensioned dial train is completely made of steel.

The individual manufacturing facilitates individual equipment according customers demands, e.g. potentiometer, encoder.....

Dependent on the number of contacts different housing sizes are available and necessary. Please call us for assistance!

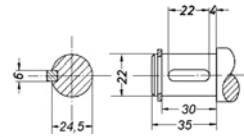
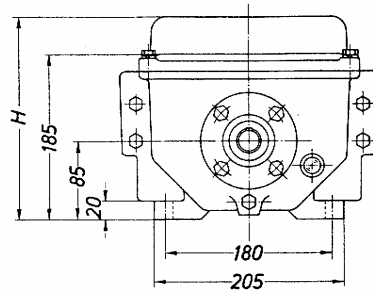
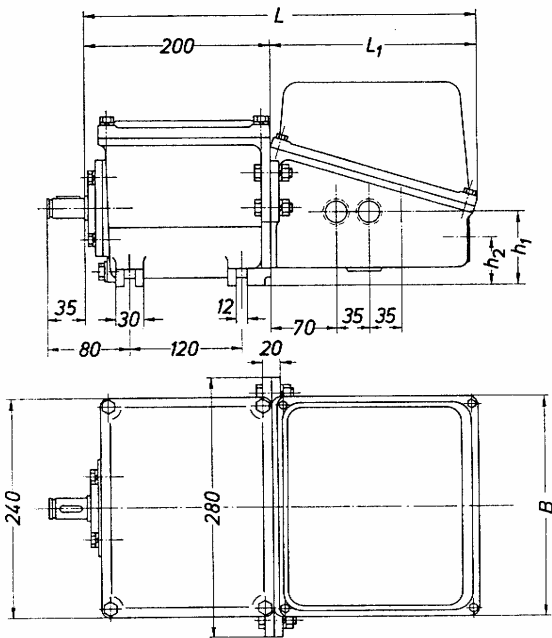


Guarantor for precision and long-life stability:
The dial train completely made of steel

To the function of dial trains:

Dial trains are known from the kilometer meter (clock) of the old cars mechanical tachometer. If at these devices after 999kilometers the clock jumps over to 1000km, it happens within a section of 0,1km on the road. On the disc of the 1 of the 1000 you can imagine a cam. And this cam actuates the contact. This cam is in reality a snap action mechanism actuating simultaneously up to 6 contacts. Rotating back this dial train, the area of the cam is left and the switch switches back.

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Housing size	L	L ₁	B	H	Cable inlets
0	385	185	240	205	2 per side
1	425	225	240	230	3 per side
3	445	245	340	245	2+2 per side

Kontaktauswahl

Type	I _{th}	Switching capacity AC (KW)	Switching capacity AC (A)		
			220V	380V	500V
40	40A	cos phi = 1	5,5	9,5	12,5
		cos phi = 0,4	1,1	1,4	1,2
120	120A	cos phi = 0,4	30	50	47
200	200A	cos phi = 0,4	60	90	85
Free adjustable aux contacts			Switching capacity AC (A)		Switching capacity DC (A)
11	15A		15	15	0,5

Technical Data

Material of housing	Grey cast iron
Coating	blue RAL 5001
Ambient temperature	-40°C up to +85°C
Applicable standards	EN 60947 VDE 0660 part 200
Number of contacts	up to 6 per limit stop
Protection	IP65
Mounting position	upright
Driving speed	max. 120 rpm
Torque for switching	15 Nm
Oilfilling of the gear box	0,8 Liter, according to manual (not part of the delivery)
Weight	30 up to 42 kg dependent on equipment