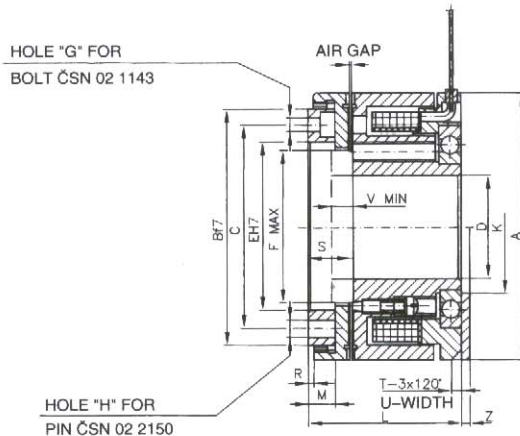




POHONY • DRIVES • ANTRIEBE

(Lengths L 54 58 70)



## CLAW CLUTCHES ELECTRICALLY ACTUATED - RINGLESS EZF

CLUTCHES ARE USED IN GEARBOXES OF MACHINE TOOLS AND EVERYWHERE WHERE IT IS NECESSARY TO CONNECT TWO ROTATING PARTS WITHOUT SLIPPING WITH POSSIBILITY OF DISCONNECTION.

## MAIN TECHNICAL DATA AND DIMENSIONS

Size			4	6.3	25	
Nominal torque	Nm		40	63	250	
Maximal revolution		min <sup>-1</sup>	7500	6500	5000	
Air gap when clutch is disconnected		mm	0.45	0.5	0.6	
Field coil -	voltage	V	24	24	24	
	current by 20°C	A	0.91	1.2	2.8	
	input by 20°C	W	21.84	28.8	67.2	
Diameters	A-0.2	mm	75	85	118	
	Bf7	mm	65	75	105	
	C+0.1	mm	55	62	90	
	DH7 (finished bore with keyseat)	mm	20	25	40	
			25	28	45	
			28	30	50	
	EH7		45	50	75	
	F <sub>max</sub>		38	43	68	
	G bolt/No		M4/4	M5/4	M6/4	
	H pin/No		5/2	5/2	8/2	
	K		40	45	65	
	Lenghts	L		54	58	70
		M		9	9	13
		R		2	2	3
		S		16	16	20
T			5	5	6	
U			6	6	8	
V <sub>min</sub>			9	9	10	
Z			2.5	2.5	3	
Ball bearing series 160			16 007	16 008	16 012	
Moment of inertia						
- magnetic		kgm <sup>2</sup>	0.00029	0.00057	0.0030	
- armature with flange		kgm <sup>2</sup>	0.00029	0.00052	0.0024	
Maximal unbalance of complete magnetic body		gmm	34	46	72	
Weight		kg	1.40	2.00	4.20	

Clutches connect driving and driven parts by use of parts provided with claw gearing. Gearing meshing is provided by electric magnet and throwing out is provided by use of springs. Driven part of clutch is formed by magnetic body with claw gearing. Inside the body are placed pins with springs and adjusting screws. Shaft of driven part is mounted in the hole of magnetic body. Driving part of clutch consists of metallic plate with claw gear into which flange made from non-magnetic material is in mesh with external teeth. Permanent magnets are fixed in the flange to hold the armature in disengage state. By claw gear of armature and magnetic body torque is transmitted from driving part to driven part of clutch. Exciting coil is fixed in carrier which is mounted on antifriction bearing in magnetic body. Two outlets are made by insulated stranded wire 300 mm long. Carrier does not rotate. Clutches can be engaged only in rest or when revolutions are synchronized and possibly when difference in number of revolution is small, the drive is adequately elastic and moment of inertia of driven parts is small. Disengaging can be carried on by any permissible revolutions and transmitted torque. Claw clutches are suitable for both dry and lubricated surrounding. Ringless clutches for dry surroundings are supplied with lid to prevent dust penetration into ball bearing. Dimensions of claw clutches are smaller when compared with electrically actuated multi-plate clutches for the same torque.