

German Standardized Clockwork 2007

Specific tools needed:

Allen key	2 mm
Tap drill	M4
Tap drill	M6
Tap drill	M10
Tap dye	M10
Drill bit	2.5 mm
Drill bit	2.9 mm
Drill bit	3.5 mm
Drill bit	4 mm
Drill bit	5 mm
Drill bit	6 mm
Drill bit	13 mm (for od of nylon bushing)
Drill bit	8 mm (for od of nylon bushing)

Materials to be bought:

Item	Quantity	Specification
Bolt	2	M4x30
	4	M4x15
	4	M6x10
	2	M6x70
nut	2	M4
	4	M6
	2	M10
washer	1	10mm(+) inner dia, outer dia 39mm (+)
Bicycle gear	1	48 teeth (1/2"x1/8")
Bicycle chain	1	1/2" x 1/8"
pipe	(30 mm length)	3/4"
flat		50x10
		50x6
		50x3
		40x3
		25x6
		25x3
Square rod		16x16
		12 x12
SS-bright bar (for main axle)	250mm long	10mm
Compression-spring	1	5mm wire, 29 id, 39 od, length 58 mm
Kit of ready made parts	1	

Note:

File ends of M4x15 bolts for 5mm axis (to make them grip better).

Kit of ready made standardized parts

Item	Quantity	Specification
Gear	1	Modul 2, 102 teeth, 2mm thick
Sprocket	1	1/2" x 1/8" , 8 teeth
Hardened dowel	1	2 x 50
Hardened dowel	2	3 x 20
Pinwheel	1	(assembled)
ss-bright bar	1	5 x 150
Nylon Bush	2	5mm id, 8.0mm od
Nylon Bush	2	10 id, 13.0mm od
25x6	1	Center of pendulum (three holes)
Freewheel	1	16 teeth

Cutting List for standardized clockwork of 8 or 10 sqm Reflector

Profil	Number of parts	lenght	name
25x3	1	40	Bearing of pendulum
	1	100	Pendulum
	1	155	Pendulum
	1	30	To hold 2x50 dowel
25x6	1	40	Bearing of pendulum
	1	60	Center of pendulum
	1	65	} Pendulum holder
	1	38	
	1	30	} Bracket for small axle
	2	70	
40x3	1	50	Counterpart of bearing for pendulum
50x10	1	200	} Main Structure
	1	110	
	1	60	
	1	20	Weight for adjustment
	1	30	Bottom of pendulum
50x6	1	50	For flange on 10mm axle
	2	6	Adjustment of clutch (30mm long)
	1	50	Top weight of pendulum
50x3	1	50	For flange on 5mm axle
16x16	1	15	For flange on 10mm axle
12x12	1	14	For flange on 5mm axle
	1	10	To hold 5mm axle
¾" pipe	1	30	Inside of clutch