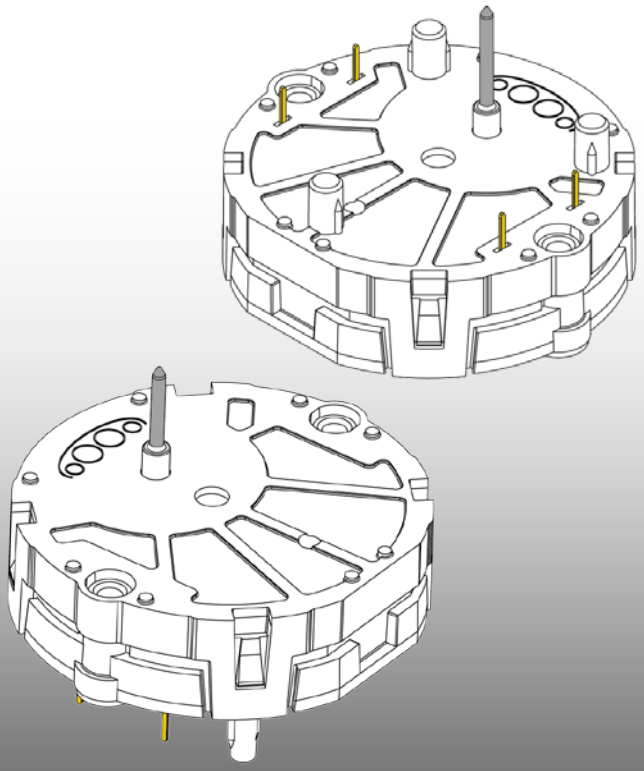
JUKEN Swiss Technology

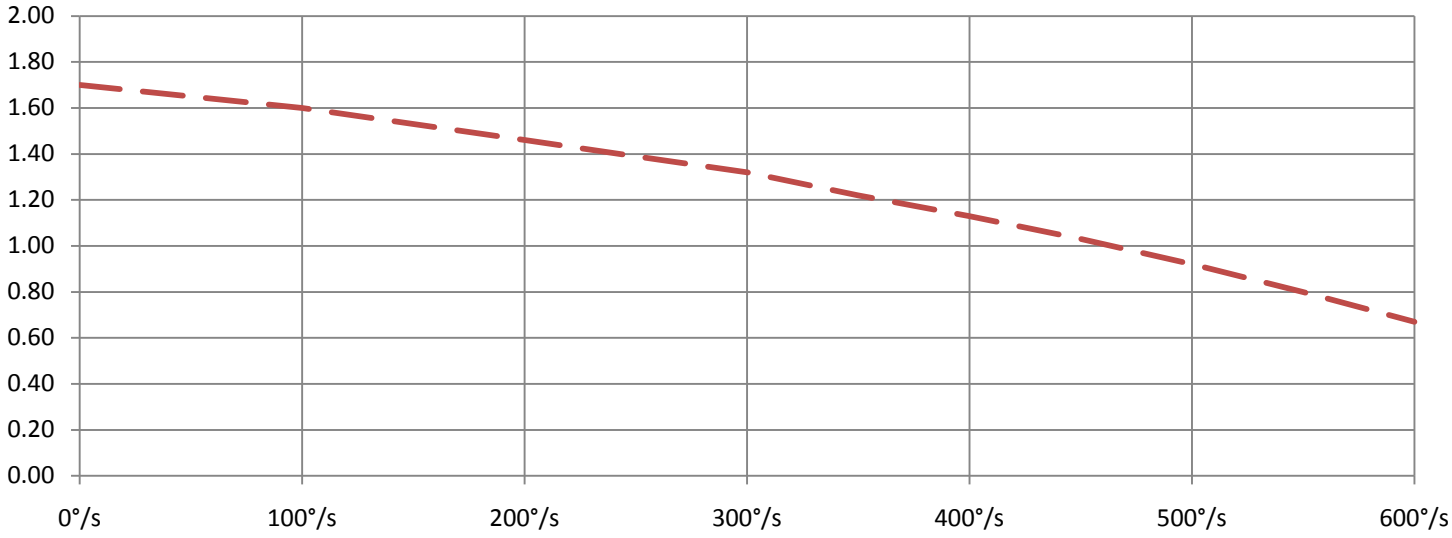


X27

Automotive instrumentation stepper motor

- 1/3° resolution per partial step
- High rotation speed up to 600°/s
- High efficiency over full automotive Temperature range
- Dome option for large pointers
- Front or rear contacts

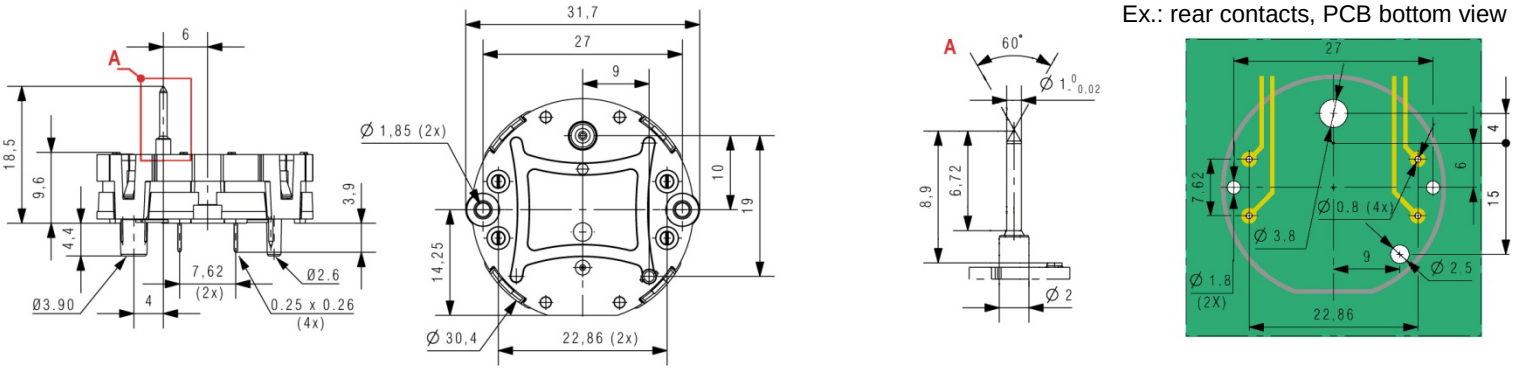
Dynamic torque [mNm] on shaft

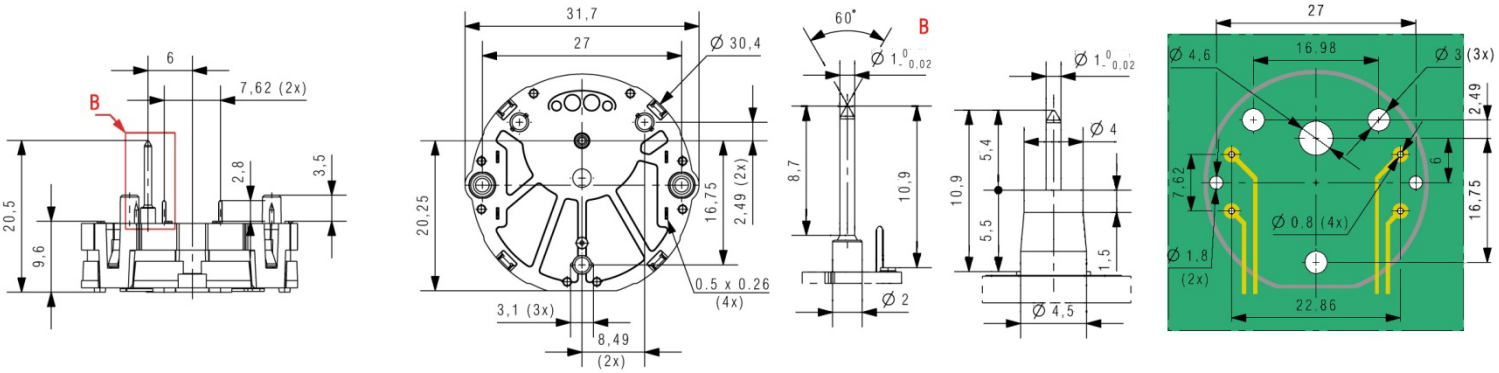


JUKEN SWISS TECHNOLOGY
Oelirain 5 , CH-2540 Grenchen
Tel. +41 (0)32 461 40 40
www.jukenswisstech.com

ISO/TS 16949
ISO 14000
ISO 9001

X27 – Technical data





T_{amb} = 25°C

		Min.	Typ.	Max.	Unit
1	Dynamic torque on the pointer shaft at 200°/s and 5.0V_{DC} supply	1.0	1.45		mNm
2	Start-Stop frequency f_{ss} at pointer inertia load 0.2x10^{-6} kgm^2			200	°/s
3	Maximum operating speed f_{max} with appropriate acceleration			600	°/s
4	Angle of rotation with internal stop			315	degree
5	Holding torque powered	3.5	4.0		mNm
6	Operating voltage (phase shift 60°)		5.0	9.0	V_{DC}
7	Coil resistance per coil	230	260	290	ohm
8	Gear play on shaft		0.5	1	degree
9	Equivalent inertia (J_{M-S} reported to the indicator shaft)		6.1e-7		kgm^2
10	Rotating angle for an electrical period (gear ratio 1:180)		2		degree
11	Maximum axial force on the pointer shaft (stake-on) Maximum radial force on the pointer shaft			150 12	N N
12	Noise level of the motor, measurement distance 4 cm from top of shaft, not mounted, without load, angular speed 200°/s		40		dB(A)
13	Acceleration of sinus vibration test (5..250 Hz), 8h, each direction, at pointer inertia load 0.2x10^{-6} kgm^2		6g		m/s^2
14	Operating Temperature	-40		+105	°C
15	Soldering Temperature (10 sec)		260		°C