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A company of Wellgain Group

VID78 Precaution of Pointer Assembly 指針装配要點

Description	Diagram 图解	Specification 标准		Possible problems when over limit	Remarks 备注
描述	Diagram Estre	Specification Limit 極限	Writ 单位	_Possible problems when over inmit 	Remarks 首注
Maximum Push On Force 最大壓力	V Push Force	130 max.	N N	Wire damaged/ Wire broken/ Gear damage/ Abnormal Noise/ Gear & shaft mounting is damaged	Proper fixing motor on PCB. Proper supporting during assembly. 电机需正确焊接上PCB; 电机装配时需合适的支持;
Minimum Assembly Support 最小裝配支承	Push Force	ф 17 min.	mm	Wire damaged/ Wire broken/ Gear damage/ Abnormal Noise/ Gear & shaft mounting is damaged 断线线伤齿伤\杂音\齿轮与指针 轴埋注受损	Concrete base support should be located within +/- 1.0mm concentricity to the motor 支承台需與電機保持 +/-1.0mm同心.
Maximum Pull Out Force 最大撥出力	Pull Force	70 max.	N	Wire damaged/ Wire broken/ Gear damage/ Abnormal Noise/ Gear & shaft overmoulding damage/ Low pull out force 断线\线伤\齿伤\杂音\ 齿轮与指针轴埋注受损\低拔出力	Repetivitive push & pull force should also be avoided. This could weaken overmoulding force between gear and shaft, then it induce low pull out foce. 避免重复的推拉力,因 齿轮和轴 的埋注可能被弄 伤 ,同 时会大幅减 低拔出力.
Maximum Perpendicular Force 最大橫向力		12 max.	N	Output shaft bend/ Non-concentric rotation of output shaft 轴弯\ 指针转动晃动	Excess perpendicular force should be avoided to bend the shaft. 需避免 过 大横向力,防止轴弯.
Maximum Force Inclination 最大力傾斜度	Force	4.5 max.	degree	Output shaft bend/ Non-concentric rotation of output shaft 轴弯\ 指针转动晃动	Excess inclination of applied force should be avoided to bend the shaft. 施加外力時,需避免外力 过 大傾斜,防止轴弯.
Maximum Straightness Deviation of Pointer Assembly 最大指針裝配 垂直度偏差	Pointer (A) // 0.30 A	0.30 max.	mm	Output shaft bend/ Non-concentric rotation of output shaft. 轴弯\ 指针转动晃动	Pointer straightness should be maintained within 0.3mm during assembly. Excess inclination could induce excess perpendicular force and bend the shaft. 當裝配時指針需保持直度0.3mm垂直,过量倾斜会导致轴弯.
Maximum Assembly Speed 最高裝配速度	V Max. Assembly speed	3 max.	mm/sec	Gear damage/ Gear & shaft mounting is damaged 齿伤\ 齿轮与指针轴埋注受损	Excess assembly speed could induce excess force on gears. 装配速度太快会使齿轮受力过大.
Maximum External Torque 最大外加扭力	External Torque	30 max.	mNm	Gear damage/ Gear & shaft overmoulding damage / Low pull out force / Stopper damage (360 Degree Rotate) 齿伤 齿轮与指针轴埋注受损\ 低拔出力\ 限位受损	Excess external torque applied on shaft would weaken overmoulding force between gear and shaft. It induce low pull out force. 过量外加扭力,齿轮和轴的埋注会弄伤. Repetivtive external torque, even less than 40mNm, could also damage the overmoulding force, it should be avoided. 避免重复的外加扭力,即使小于40mNm,因齿轮和轴的埋注可能被弄伤,同时会减低拔出力. Zero reset should be done before assembly, then pointer is assembled while pointing to zero. Zero reset manually should be avoided. 装配前需先回零,指针对准零位装配.需尽量避免手动拨指针回零。
Maximum External Turning Speed 最高外加轉動速 率	External Turning Speed	60	°/sec.	Gear damage 齿伤	Excessive external turning speed would induce excessive force on gears, it must be avoided. 过高外加速度,能引起齿轮上產生过大應力,必須避免.