



创新 / 合作 / 共赢

Spring Motor Manual

FTH 系列 弹簧马达手册



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雨凡机械科技(上海)有限公司
YuFan Machinery Technology(Shanghai) Co., LTD.

FELICIA FTH系列弹簧马达

专为无电源、防爆或极端工况设计，广泛作为备用启动系统适配各类柴油发动机。



无电启动 · 全能应急

独立弹簧储能驱动，脱离电力、气源限制，是柴油机组、船用主机、工程设备的刚需应急启动配套。



防爆阻燃 · 工业专用

全机械安全设计，零火花、零漏电，完美满足防爆区域安全规范，高危工况专属解决方案。



稳定可靠 · 全天候待命

设备突发故障时，随时可靠启动。



强力启动 · 扭矩充足

精密弹簧组储能，瞬间释放大扭矩，轻松驱动大马力柴油机，启动强劲不卡顿。



	FTH09	FTH14	FTH16	FTH19
啮合方式	预啮合			
最大发动机排量	9 L	14 L	16L	32L
重量	15.6KG	18.3 KG	22.8 KG	26 KG
驱动力矩	126 N·m	126 N·m	126 N·m	184 N·m
最大盘动扭矩	85 N·m	85 N·m	85 N·m	110 N·m
旋向	CW 或 CCW（面朝马达鼻端看齿轮）			
安装法兰	SAE 1、SAE 2、SAE 3、定制			
适用领域	消防、船舶、应急发电			



FTH09



FTH14



FTH19

FELICIA FTH Series Spring Starters

Designed specifically for applications without power sources, in explosion-proof environments, or under extreme operating conditions, it is widely used as a backup starting system compatible with various types of diesel engines.



Battery-Free Start-Up · All-Purpose Emergency Solution
Powered by an independent spring-driven energy storage system, this solution is free from the constraints of electricity and compressed air, making it an essential emergency starting accessory for diesel generators, marine main engines, and construction equipment.



Flame-retardant and explosion-proof · For industrial use
Fully mechanical safety design, with zero sparks and zero electrical leakage, fully compliant with safety regulations for explosive environments, and a dedicated solution for high-risk operating conditions.



Stable and reliable · On standby around the clock
Reliable startup at any time in the event of a sudden equipment failure.



Powerful Start-Up · Ample Torque
A precision spring assembly stores energy and releases high torque instantly, effortlessly driving high-horsepower diesel engines with a smooth, powerful start.



	FTH09	FTH14	FTH16	FTH19
Engagement method	Pre-meshing			
Maximum engine displacement	9 L	14 L	16L	32L
Weight	15.6KG	18.3 KG	22.8 KG	26 KG
Drive torque	126 N·m	126 N·m	126 N·m	184 N·m
Maximum operating torque	85 N·m	85 N·m	85 N·m	110 N·m
Rotation direction	CW or CCW (when facing the motor nose end)			
Installation Flange	SAE 1、SAE 2、SAE 3、Custom			
Applications	Fire Safety、Marine、Emergency Power Generation			



FTH09



FTH14



FTH19