

发动机气动启动马达

Engine Air Starter

FAP™



产品系列 Product series

FD08 系列 Series



- ▶ 双涡轮驱动方式的马达，工作压力 20-150 psi (1.4-10.3 BAR),同类产品中工作压力最低
Twin-turbo motor drive mode, the working pressure of 20-150 psi (1.4-10.3 BAR), the minimum working pressure of similar products
- ▶ 低压、脏或潮湿的空气对马达性能无任何影响 Low pressure, dirty or damp air

- ▶ 重量仅为 8.2Kg (18 IBS)/带启动阀重量仅为 10.2Kg (22.5 IBS)
Weighs only 8.2Kg (18 IBS) / with start valve weighs only 10.2Kg (22.5 IBS)

FD22 系列 Serise



- ▶ 双涡轮驱动方式的马达，在相同条件下输出扭矩是其它类型马达的 125%
Twin-turbo motor drive mode, the output torque under the same conditions is 125% other types of motor
- ▶ 工作压力 60-150 psi (4.1-10.3 BAR) Working Pressure 60-150 psi (4.1-10.3 BAR)

- ▶ 结构更加紧凑，体积更加小巧，重量仅为 29 IBS(13.2KG)
More compact, more compact size, weighs only 29 IBS (13.2KG)
- ▶ 污染气体对马达性能无任何影响，适合在各种恶劣环境中使用；具有耐腐蚀特性
Polluting gases without any impact on the performance of the motor, suitable for use in a variety of harsh environments; corrosion resistant properties



FD70 系列 Serise

- ▶ 重量最轻，只有 34 IBS (15.4 Kg) Lightest, only 34 IBS (15.4 Kg)
- ▶ 产生的噪音明显比同级别任何启动器都低

Noise generated significantly lower than in the same level of any starter

- ▶ 启动器构件材质全部采用铝合金和钢，无任何塑料部件
Starter member material all aluminum and steel, no plastic parts
- ▶ 污染气体对马达性能无任何影响，非常适合在各种恶劣环境中使用
Polluting gases no impact on motor performance, ideal for use in harsh environments
- ▶ 每单位体积的压缩空气产生的功率和扭矩比其他品牌更大
Power and torque per unit volume of the compressed air generated more than other brands



FD300 系列 Serise

- ▶ 双涡轮驱动式的马达，免气路润滑，比同类产品高出 25% 的输出扭矩
Twin turbo motor Free air line lubrication, 25% higher than similar products output torque

- ▶ 应用于高达 300 升 (18000 CID) 排量的发动机
Applications up to 300 liters (18000 CID) engine displacement
- ▶ 工作压力 40-150 psi (2.7-10.3 BAR) Working Pressure 40-150 psi (2.7-10.3 BAR)
- ▶ 无油无污染排放，减少维护与清洁，启动更加可靠；能够在严重污染的压缩空气下使用
No oil pollution emissions, reduce maintenance and cleaning, start more reliable; can be used in the heavily polluted air

产品参数 Product parameter

参数 \ 型号	FD08 系列	FD22 系列	FD70 系列	FD300 系列
啮合类型	惯性式启动	预啮合式启动	预啮合式启动	预啮合式启动
最大工作压力 (Psi)	150	150	120	150
最大功率 (HP)	15	35	41	68
最大功率耗气量 (m³/h)	734	1020	1397	2502
最大功率时转速 (RPM)	2300	2750	1920	2250
堵转扭矩 (NM)	108	183	323	472
发动机引擎最大排量 (升)	8	22	70	300
进气口尺寸	NPT 1"	NPT 1"	NPT1-1/2"	NPT2"
旋 向	R/L	R/L	R/L	R/L
安 装	SAE1#、2#、3#法兰	SAE1#法兰 SAE3#法兰	SAE3#法兰	SAE3#法兰
重量 (kg)	8.2	13.2	15.4	23
适用发动机型号	卡特彼勒: 3304、3306 等等	卡特彼勒: 1145、3145、1673 康明斯: NT-4-B NT-200-B、V8、6C 等等	卡特彼勒: 3508、3512、3516、D-353 康明斯: K19、K38 等等	卡特彼勒 3618 EMD GM: 12-278/498 等等

Parameter \ Model	FD08 Series	FD22 Series	FD70 Series	FD300 Series
Engagement type	Inertial	Pre-engagement	Pre-engagement	Pre-engagement
Maximum operating pressure (Psi)	150	150	120	150
Maximum power (HP)	15	35	41	68
Maximum power gas consumption (m³/h)	734	1020	1397	2502
The maximum power speed (RPM)	2300	2750	1920	2250
Stall Torque (NM)	108	183	323	472
Maximum engine displacement engine (liters)	8	22	70	300
Air inlet size	NPT 1"	NPT 1"	NPT1-1/2"	NPT2"
Rotation	R/L	R/L	R/L	R/L
Mounting	SAE1#、2#、3# Flange	SAE1#法兰 SAE3# Flange	SAE3# Flange	SAE3# Flange
Weight (kg)	8.2	13.2	15.4	23
Applicable Engine Model	Caterpillar: 3304、3306 etc	Caterpillar: 1145、3145、1673 Cummins: NT-4-B NT-200-B、V8、6C etc	Caterpillar: 3508、3512、3516、D-353 Cummins: K19、K38 etc	Caterpillar 3618 EMD GM: 12-278/498 etc

辅件 Accessories

 <p>主启动阀: FRV-25-8 FRV-32-8 FRV-38-8</p> <p>Relay valve</p>	 <p>减压阀: F-RV20-8</p> <p>Air regulator</p>
 <p>Y 型过滤器: F-YST-A40 F-YST-B40 F-YST-C40</p> <p>Air strainer</p>	 <p>手动阀: F-CV02-8</p> <p>Manual valve</p>  <p>电磁阀: F-EV02-8</p> <p>Solenoid valve</p>

应用案例 Applications

