

EX Series

UL Listed Explosion-Proof Servomotors



Description

The EX series from Parker SSD Parvex is a range of permanent magnet servomotors designed for use in hazardous atmospheres. Featuring robust explosion-proof housings, EX motors are capable of bearing internal explosions with no risks of propagation to the neighboring environment. Two versions are available, allowing compliance with either North American or European safety standards.

Based on an innovative 10-pole design, EX servomotors are characterized by an excellent motion quality, great acceleration / deceleration capabilities, and high torque values over a wide speed range. Various winding configurations are available for maximum flexibility. Tailored Torque/Speed characteristics can also be specified to meet specific application demands.

Use with the AC890 drive for a complete package.



Information Contact

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Product Features

- Permanent magnet servomotors with explosion proof housings
- UL Listed and ATEX versions available
- 230, 400 and 480 VAC rated windings
- IP65 (UL Version)
- Solid smooth or keyed shaft
- Resolver or sin/cos encoder feedback
- Options :
 - High resolution absolute multi-turn encoders (HIPERFACE® or EnDat®)
 - Brake
 - Smooth or keyed shaft
 - Custom mechanical interface
 - Custom windings



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Overview

Technical specifications

Torque range	1.75 to 35 Nm/1.3 to 26 ft-lb
Speed range	2000 to 8000 rpm
Rated voltages	230, 400 and 480 VAC
Shaft heights	35, 46, 60 and 77.5 mm
Thermal protection	Thermo-switches and Thermo-fuse integrated into the winding.
Connections	Rear exit NPT pipe thread (UL version) Cable glands (CE version)
Classifications	UL Listed version (for use in North America): Class 1, Division 1, Group C & D UL 674 Standard ATEX 94/9/EC version (for use in Europe): II 2G EEx d IIB T4 (Gas) or II 2GD EEx d IIB T4 IP65 T135°C (Gas and dust) EN50014, EN50018 and EN50281-1-1 Standards

Applications:

EX servomotors have been designed for use in industrial environments where there is an accumulation of gas, mist, dust or vapor which, when mixed with air, has the potential to catch fire or explode.

That includes among other applications :

- Printing and converting machinery
- Paint spraying equipment
- Plastics machinery
- Chemical, petro-chemical and pharmaceutical processes
- Waste processing plants

Safety Compliance:

Two different versions are available:

Version “U”, conforming with both Canadian and US safety requirements for use of electrical equipments in explosive atmospheres. This version of EX servomotors has rear exit NPT pipe threads for power and sensor connections. It is identified by the presence of the following mark:



Version “E”, conforming with the European safety requirements imposed by the ATEX 94/9/EC Directive. The ATEX version with IP64 protection level is adapted for use in presence of flammable gas only, whereas the IP65 level offers sufficient protection for use in presence of both flammable gas and dust. ATEX compliant versions of EX servomotors are identified by the following logo:



Product code

E	X	3	1	0	U	A	K	R	1	2	0	0
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Safety compliance

U: UL Listed
E: ATEX 94/9/EC

Feedback Sensors

A : 2 pole resolver (standard)
R: HIPERFACE single turn (128 periods/rev)
SKS36 encoder
S: HIPERFACE multi-turn (128 periods/rev)
SKM36 encoder
V: ENDAT single turn ECN1113 encoder
W: ENDAT multi-turn EQN1125 encoder

Winding

Brake

2: Motor without brake (standard)
5: Motor with 24VDC brake

Ingress Protection Level

0: IP64
1: IP65 (standard)

Shaft End

0: Smooth Shaft
1: Keyed Shaft (standard)

