



# 5EC-P

## **Series 5EC-P SURE DRIVE Electromagnetic Pilot-Mount Tooth Clutches**



### ***Stationary Field for Dry Operation***

Series 5EC-P electromagnetic tooth clutches are designed for dry operation. When a DC voltage is applied, a magnetic field is generated, bringing the two toothed rings into mesh. This provides a positive slip free drive. The armature is spring-loaded to ensure rapid disengagement and zero drag when disengaged.

#### **Features**

- One-piece construction, eliminates costly installation setting and alignment procedures, and ensures all axial forces are contained within the clutch assembly
- Bearing mounted pilot mount, provides rigid precise location for direct attachment of power transmission components and reduces engineering required by machine builder
- 'Hirth' type drive teeth provide high torque in a compact envelope and positive drive without slip
- Stationary coil and magnet assembly allow high running speeds and simple connection to DC power supply without brushes.

#### **Typical Applications**

- Machine Tools
- Heavy Machines
- Steel Production, Processing and Machining
- Lifting Gear and Container Cranes
- Synchronization Clutches for series switching of two electric motors
- Dynometers and Test Equipment
- Remotely Operated Equipment
- Metal and Material Handling
- Cardboard Box Machining

For Technical Assistance Call

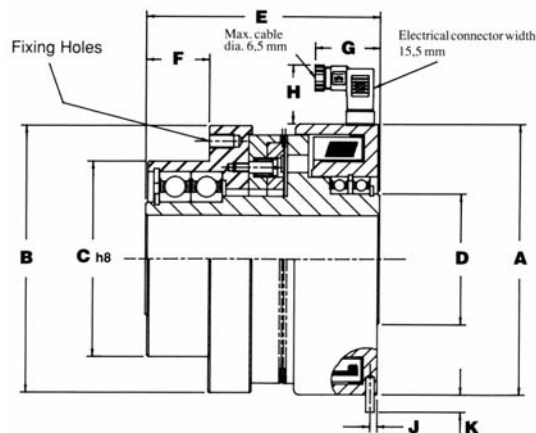
**800-825-9050**

 **Matrix**<sup>®</sup>  
International  
An Altra Industrial Motion Company



S.I.T., S.A. | Tfno. 943 457200 | [www.sitsa.es](http://www.sitsa.es) | [atencioncliente@sitsa.es](mailto:atencioncliente@sitsa.es)

MODEL		5EC 025P	5EC 035P	5EC 055P	5EC 070P
<b>Performance Data</b>					
Rated Static Torque	Nm	50	200	800	1800
	lbf ft	37	148	590	1325
Power Consumption at 20° C	Watts	19	26	63	120
Maximum Speed	rpm	5800	4000	3000	2600
<b>Dimensional Data</b> (all dimensions in mm)					
Standard Bores (H7) Keyways to I.S.O. 773 B.S. 4235:1972 Pt. 1 D.I.N. 6885:1968 Pt. 1; NF.E22-175 (Bores other than standard can be obtained by special order)		—	30 8 x 3.3	50 14 x 3.8	60 18 x 4.4
		20 6 x 2.8	25 8 x 3.3	45 14 x 3.8	55 16 x 4.3
		15 5 x 2.3	20 6 x 2.8	40 12 x 3.3	50 14 x 3.8
<b>Diameters</b> (all dimensions in mm)					
A		74	98	155	209
B		74	98	153	209
C (h8)		52	75	112	145
D		35	45	75	95
<b>Lengths</b>					
E		77	100	133.5	165
F		15	23	36	46
G (ref)		34.5	34.5	37.2	40
H (ref)		32	32	32	32
J		2.5	2.5	5	6.5
K		8.1	10	10	10
<b>Fixing Holes</b>					
Number		3	3	6	6
Size		M4	M6	M8	M10
P.C.D.		65	88	135	180
Depth		8	12	14	20
<b>Driving Teeth</b>					
Number of Teeth		168	192	264	288



**Matrix International**  
 449 Gardner St. • South Beloit, IL 61080  
 815-389-6274 • Fax: 815-389-2582  
 E-mail: matrix.usa@altramotion.com  
 www.matrix-international.com

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