

## FEEDBACK FEATURES

### E1 TTL ENCODER

| Motor size               |                    | TC 40 - 60 - 80        |
|--------------------------|--------------------|------------------------|
| Nominal Voltage          | V                  | 5 ± 5%                 |
| Nominal current          | mA                 | 200                    |
| Max Frequency            | Khz                | 200                    |
| Electronic type          |                    | LINE DRIVER AM 26 LS31 |
| Zero impulse             |                    | ONE AT A LAP           |
| N° of pulses revolution  | ppr                | 2000                   |
| Resolution               | cpr                | 8000                   |
| N° of commutation signal |                    | 3 DIFFERENTIAL         |
| System accuracy          | arc sec            | ± 50                   |
| Rotor inertia            | Kg cm <sup>2</sup> | 0.01                   |

Please note: for all motors size **TC 40** - all motors size **TC 60** with encoder TTL the maximum theoretical acceleration is 80.000 rad/s<sup>2</sup>

### R1 RESOLVER 2 poles

| Motor size            |                    | TC40     | TC60 - TC80 |
|-----------------------|--------------------|----------|-------------|
| Nominal Voltage       | Vrms               | 7 ± 5%   | 7 ± 5%      |
| Nominal current       | mA                 | 50       | 50          |
| Phase shift           |                    | +5°      | +3°         |
| Minimum sin amplitude | mVrms              | 20       | 20          |
| Frequency             | kHz                | 10       | 10          |
| Poles number          |                    | 2        | 2           |
| Trasformer ratio      |                    | 0.5 ± 5% | 0.5 ± 5%    |
| Input impedance       | ohm                | 160      | 130 + j280  |
| Output impedance      | ohm                | 130      | 425 + j755  |
| System accuracy       |                    | ± 10'    | ± 10'       |
| Rotor inertia         | Kg cm <sup>2</sup> | 0.006    | 0.03        |

### A1 ABSOLUTE MULTITURN ENCODER

| Motor size                           |                    | TC40 - TC60 - TC80 |
|--------------------------------------|--------------------|--------------------|
| Nominal Voltage                      | V                  | 7 ÷ 12             |
| Nominal current                      | mA                 | 60                 |
| Max frequency fon Sin Cos signal     | Khz                | 65                 |
| Interface type                       |                    | Hiperface          |
| N° absolute singleturn steps         |                    | 4096 (12 Bits)     |
| N° absolute multiturn steps          |                    | 4096 (12 Bits)     |
| N° of sin/cos periods per revolution |                    | 128                |
| System accuracy                      | arc sec            | ± 320              |
| Rotor inertia                        | Kg cm <sup>2</sup> | 0.0045             |