

t: +(27) 011 468 1881 c: +(27) 074 465 1744  
 e: 01@BirCraft.co.za w: [www.BirCraft.co.za](http://www.BirCraft.co.za)

## Tachogenerators

### BATAC444SR



#### Applications:

- Industry Applications
- Speed Control and Regulation

#### Features:

- Robust Design
- High Quality signal
- Terminal box
- Mechanical combinations with encoders and speed switches
- Various electrical options

#### Characteristics:

DESCRIPTION:	VALUE:
MAX. SPEED	: 12 000 RPM
MOMENT OF INERTIA	: 0.95 KG cm <sup>2</sup>
NO-LOAD DRIVING TORQUE	: 1.5 N·cm
MAX. RADIAL SHAFT STRESS:	: 1.0 da N
MAX. E.M.F	: 600 V
MAX. LINEARITY ERROR	: ≤ 0.15 % E <sub>r</sub>
OVERALL RIPPLE RATE	: ≤ 0.5 % E <sub>c</sub>
ROTATION HARMONICS	: ≤ 02 % E <sub>c</sub>
SLOTS HARMONICS	: ≤ 03 % E <sub>c</sub>
CALIBRATION PRECISION	: ± 1 % E <sub>to</sub>
E.M.F TEMPERATURE DRIFT	
• NOT COMPENSATED	: 0.02 % /°C
• COMPENSATED	: 0.005 % /°C
TIME CONSTANT	: 2.5 ms
*FILTER:	
• TIME CONSTANT OF FILTER	: 0.47 ms
• LOAD CURRENT	: 5 mA
SPEED	: 3000 RPM

DESCRIPTION:	VALUE:
NUMBER OF POLES	: 2
ARMATURE SLOTS NUMBER	: 19
COMMUTATOR BLADES NUMBER	: 57
INSULATION CLASS	: B (IEC 34-1)
OPERATING TEMPERATURE	: -30° + 130 °C
CLIMATIC PROTECTION	: C <sub>a</sub> (IEC 68-1)
INGRESS PROTECTION	: IP44 (IEC 34-5)
DIRECTION OF ROTATION	: Reversible
EXCITATION <i>Permanent Magnets</i>	: Alnico
WEIGHT	: 2.8 KG

#### Mechanical Options:

MOUNTING SIDE			
	D (mn):	L (mn):	BEARINGS:
STANDARD SHAFT	11	30	15 x 32 x 9 ZZ
SPECIAL SHAFT	14	-	15 x 32 x 9 ZZ

OPPOSITE MOUNTING SIDE		
D (mn):	L (mn):	BEARINGS:
		8 x 26 x 8 ZZ
10	-	8 x 26 x 8 ZZ



Markings and polarity of terminals (cables) for counterclockwise rotation, seen from the shaft.

#### 1 COMMUTATOR

1 A1: +  
1 A2: -

# Tachogenerators

BATAC444SR

**BirCRAFT**  
GEARED MOTORS - LINEAR ACTUATORS - CONTROLS

- Over 40 Years of Supplying Africa -

## Electrical Options:

DESCRIPTION:	UNIT:	VALUES:										
E.M.F at 1 000 RPM	V	6	20	30	40	50	60	80	100	120	150	200
Voltage Gradient	V/ RPM	0.006	0.020	0.030	0.040	0.050	0.060	0.080	0.100	0.120	0.150	0.200
Armature Resistance	$\Omega$	1.50	12	28	45	70	100	180	280	400	640	900
Max Thermal Load	A	1.40	0.55	0.35	0.25	0.22	0.18	0.14	0.11	0.09	0.07	0.07
Max. Allowed Speed	RPM	12000	12000	12000	12000	12000	10000	7500	6000	5000	4000	3000

## Brushes:

QUANTITY:	DIMENSION:
4 or 8	3.1 x 4.1 x 12.5mm

## Dimensions:

