

## BRUSHLESS EX ATEX APPROVED

new

1.75 to 35 Nm\*

EX servo motors are "d" flameproof apparatus designed to operate in potentially explosive atmosphere according to 94/9/CE "New Approach" ATEX directive.

Based on an innovative 10-pole design, they are characterised by an excellent motion quality for a high torque density.

In combination with GA gearboxes, they offer a complete, robust and powerful ATEX geared motor solution.



"D" FLAMEPROOF EQUIPMENT IN ACCORDANCE WITH ATEX 94/9/CE DIRECTIVE\*

ATEX GEARED MOTOR SOLUTION IN COMBINATION WITH GA GEARBOX  
230V OR 400V POWER SUPPLY

INTEGRATED THERMO-CONTACT AND THERMO-FUSE FOR THERMAL PROTECTION

BRAKE OPTION

\* : 14 to 35 Nm, available soon

### EX Series - 230V power supply

Motor	M <sub>0</sub> (Nm)	N <sub>MAX</sub> (tr/min)	Inertia (kg.m <sup>2</sup> .10 <sup>-3</sup> )	Weight (kg)
EX310EAP	1.75	2300	7.9	2.7
EX310EAK	1.75	4000	7.9	2.7
EX420EAP <sup>(1)</sup>	3.5	2300	29	5
EX420EAJ <sup>(1)</sup>	3.5	4000	29	5
EX430EAJ <sup>(1)</sup>	4.8	3200	43	6
EX430EAF <sup>(1)</sup>	4.8	4000	43	6
EX620EAO	6.6	2500	98	9.1
EX630EAI	10.4	3000	147	11
EX820EAR <sup>(1)</sup>	14	2200	320	24
EX820EAL <sup>(1)</sup>	14	3600	320	24
EX840EAJ <sup>(1)</sup>	24.5	2200	620	32
EX860EAD <sup>(1)</sup>	35	2600	920	40

### EX Series - 400V power supply

Motor	M <sub>0</sub> (Nm)	N <sub>MAX</sub> (tr/min)	Inertia (kg.m <sup>2</sup> .10 <sup>-3</sup> )	Weight (kg)
EX310EAP	1.75	4000	7.9	2.7
EX420EAV <sup>(1)</sup>	3.5	2000	29	5
EX420EAP <sup>(1)</sup>	3.5	4000	29	5
EX430EAP <sup>(1)</sup>	4.8	3000	43	6
EX430EAL <sup>(1)</sup>	4.8	4000	43	6
EX620EAO	7	4300	98	9.1
EX630EAY	10.4	2900	147	11
EX630EAN	10.4	4000	147	11
EX820EAW <sup>(1)</sup>	14	2200	320	24
EX820EAR <sup>(1)</sup>	14	3600	320	24
EX840EAQ <sup>(1)</sup>	24.5	2100	620	32
EX840EAK <sup>(1)</sup>	24.5	3300	620	32
EX860EAJ <sup>(1)</sup>	35	2600	920	40

<sup>(1)</sup> : available soon

### Mechanical associations

#### GA Gearboxes - EX Servo motors

Motor	GA gearbox size		
		03 04	06
EX310 Torque, inertia 1.75 ; 7.9	GA3N...R03.. r = 5 or 25		
EX420 3.5 ; 29		GA4N...R04.. r = 5 or 25	
EX430 4.8 ; 42.6		GA4N...R04.. r = 5 or 25	
EX620 7 ; 98			GA6N...R06.. r = 5 or 25
EX630 10.4 ; 147			GA6N...R06.. r = 5 or 25

r = gearbox ratio, torque (N.m) and Inertia (10<sup>-3</sup>.kgm<sup>2</sup>)

Gearbox selection, please refer to example on page 26.

**IMPORTANT** : please confirm the operating limit of the association selected above with our technical service centre.

### EX SERVO MOTORS TECHNICAL SPECIFICATIONS

#### Classification :

- II 2G EEx d IIB T4 (Gas)
- ou II 2GD EEx d IIB T4 IP65 T135°C (Gas & Dust)
- Normes EN 50014, EN 50018 et EN 50281-1-1

#### Protection :

thermo-switches and thermo-fuse inside winding for over-temperature protection

#### Connection :

through flameproof cable glands for resolver and power (no pre-equipped cables)

#### Option :

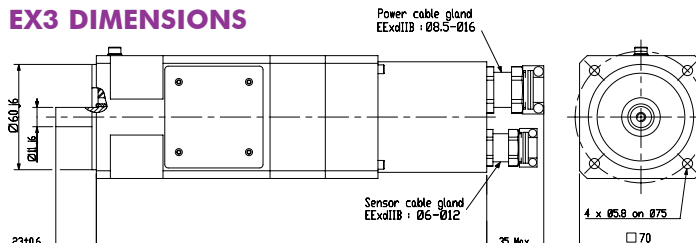
- With or without key
- With or without brake

### GA GEARBOXES TECHNICAL SPECIFICATIONS

#### Classification :

- Standard EN 13463-1

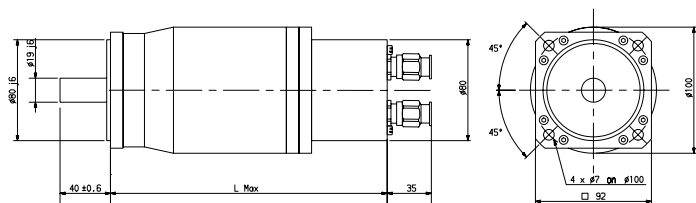
## EX3 DIMENSIONS



### EX3 Dimensions (mm)

Motor	L	
	No brake	With brake
EX310	225	255

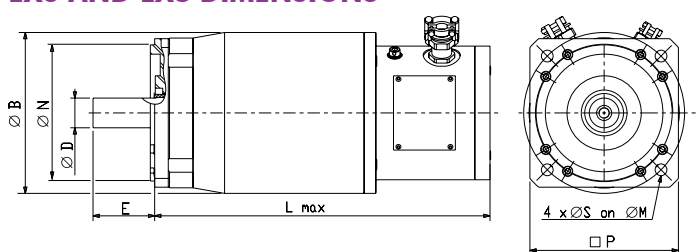
## EX4 DIMENSIONS



### EX4 Dimensions (mm)

Motor	L	
	No brake	With brake
EX420	265	290
EX430	290	315

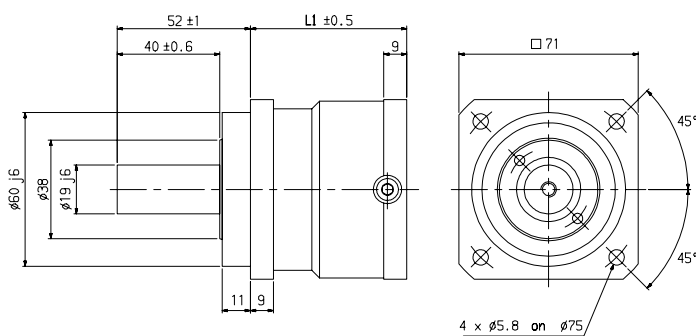
## EX6 AND EX8 DIMENSIONS



### EX6 and EX8 Dimensions (mm)

Motor	N	D	E	B	P	S	M	L	
								No brake	With brake
EX620	110	24	50	130	120	8.4	130	275	300
EX630	110	24	50	130	120	8.4	130	300	325
EX820	130	32	58	160	150	12	165	320	360
EX840	130	32	58	160	150	12	165	380	420
EX860	130	32	58	160	150	12	165	440	480

## GA3 GEARBOX DIMENSIONS

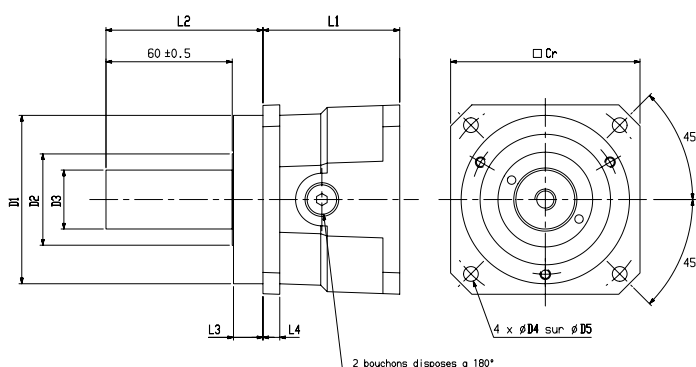


### GA3 Dimensions

Motor	r	L1	Weight
GA3	5	61	1.6
GA3	25	97	2.2

Dimensions in mm, weight in kg

## GA4 AND GA6 GEARBOXES DIMENSIONS



### GA4 and GA6 Dimensions

Gearbox	r	L1	L2	D1	D2	D3	D4	D5	□Cr	Weight
GA4	5	64.8	74.6	80j6	43	28j6	7	100	91	3.2
GA4	25	106.8	74.6	80j6	43	28j6	7	100	91	5.2
GA6	5	74.8	78.3	110j6	53	32k6	9	130	115	6.2
GA6	25	117.8	78.3	110j6	53	32k6	9	130	115	9.4

Dimensions in mm, weight in kg