

ELASTIC PRECISION JOINTS

Elastic joints

The ELTRA elastic precision joints are essential elements for the transmission of the rotational motion to the encoder shaft. The joints are in aluminium alloy, (type D11S A.A.2011) and are composed by a cylindrical body, on which there is a helicoidal groove.

The main characteristics are:

- Torsional rigidity.
- Capacity of supporting slight disadjustments of the shaft
- Capacity of absorbing small axial shift of the shaft

The ELTRA elastic joints have also a perfect balancing of the rotating body, they have not critical points subject to breakage and are completely frictionless. They transmit perfectly, moreover, the rotational motion, even if is present axial shafts, disadjustments or dissalignments of the shafts; these joints do not require any type of maintenance..

The internal drain permits the coupling with distance between the shafts from a minimum of 0.5 mm to maximum of 6.12 mm (See quota 'F').

NOTE: The elastic joint can be supplied with different coupling diameters between them, for example d1=8 mm, d2=10 mm.

In this case the identification code becomes G25 A 8/10 to place before the smallest hole diameter.

Ordering code

G 25 A 6 / 8

G = elastic precision joint

16
20
25
30

Joint dimension
(see table)

A = shaft fixing with dowel

6 = ϕ 6
8 = ϕ 8
9 = ϕ 9.52 (3/8")
10 = ϕ 10

ϕ hole "d1"

6 = ϕ 6
8 = ϕ 8
9 = ϕ 9.52 (3/8")
10 = ϕ 10

ϕ hole "d2"

N.B.: Do not indicate in the case of d1=d2

Construction data and characteristics

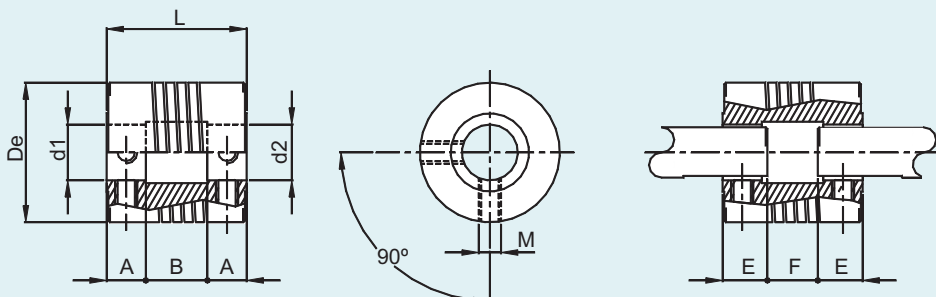
Standard joints	De	L	d1 = d2	A	B	M	E	F	Twisting moment	Type of material
G 16 A 4	ϕ 16	20 ^{+0.1} _{-0.1}	ϕ 4H7 ^{+0.012} ₀	6	8	M3	7	6	0,25 Nm	Aluminium
G 20 A 6	ϕ 20	20 ^{+0.1} _{-0.1}	ϕ 6H7 ^{+0.012} ₀	6	8	M3	7	6	0,25 Nm	
G 25 A 8	ϕ 25	25 ^{+0.1} _{-0.1}	ϕ 8H7 ^{+0.015} ₀	7	11	M4	8	9	0,4 Nm	
G 25 A 9	ϕ 25	25 ^{+0.1} _{-0.1}	ϕ 9.52H7 ^{+0.015} ₀	7	11	M4	8	9	0,4 Nm	
G 25 A 10	ϕ 25	25 ^{+0.1} _{-0.1}	ϕ 10H7 ^{+0.015} ₀	7	11	M4	8	9	0,4 Nm	
G 30 A 10	ϕ 25	30 ^{+0.1} _{-0.1}	ϕ 10H7 ^{+0.015} ₀	8	14	M4	9	12	0,4 Nm	



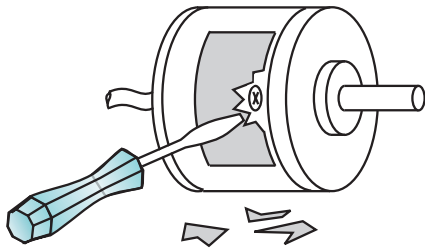
NOTE: OUR TECHNICIAN IS AT YOUR DISPOSAL FOR ANY REQUEST FOR NO-STANDARD HOLES

NOTE FOR THE INSTALLER: In order to assure the correct function, we suggest that the shafts be inserted on the joint respecting the distance "E" as shown in the above diagram.

Joint dimensions

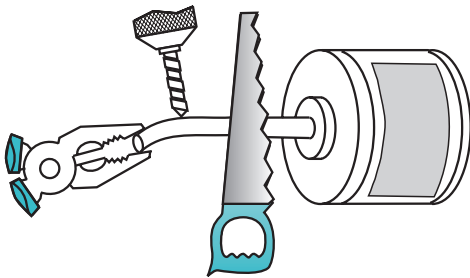
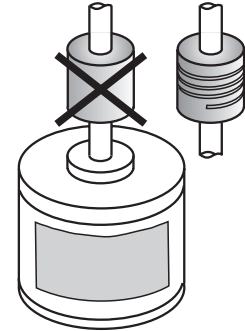


USE PRECAUTION - WHAT NOT TO DO

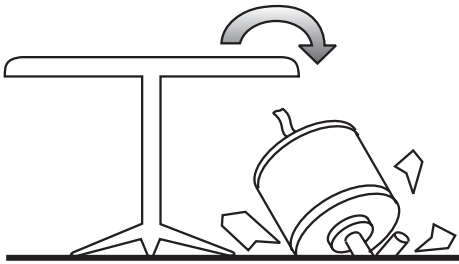


Any attempt to disassemble the encoder involves the breakage of the seal of guarantee and consequently the loss of guarantee

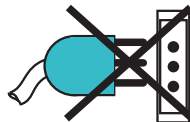
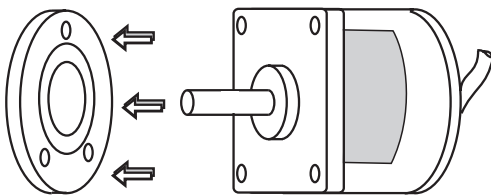
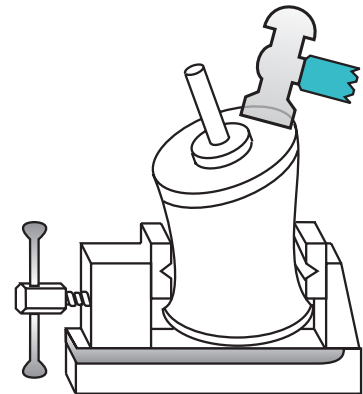
The coupling between the shafts and the encoder shaft must be exclusively made with an elastic joint (never rigid) necessary to compensate for the axial and radial misalignment. The disalignment, however, must be lower than that prescribed for the joint.



Do not modify (to cut, to drill, etc.) or submit the encoder shaft to axial or radial loads higher than those allowed.



The encoder must not be submitted to external stress and must not endure crash of any kind.



Do not assemble the encoder in a different way from the one advised, regarding either the type of fastener or power supply.