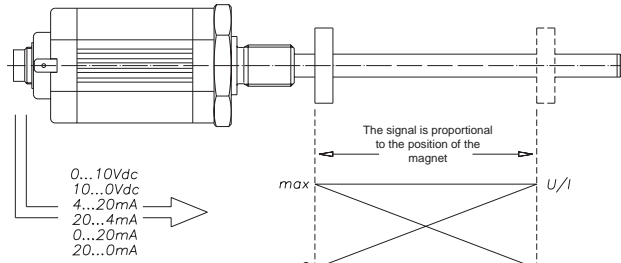


#### ANALOGUE OUTPUT

#### IK1 A

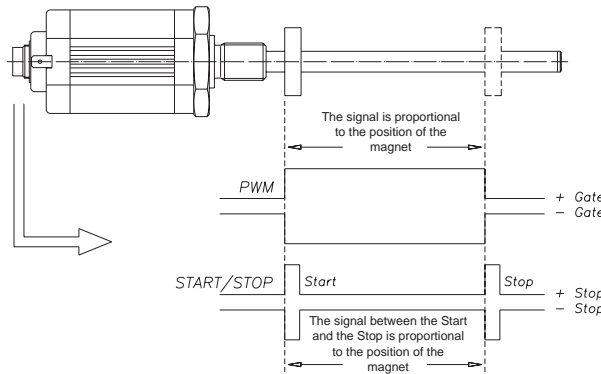


The magnetostrictive transducers of the IK1A series supply a direct analogue output in voltage (0...10Vdc) and current (4...20mA and 0...20mA). All the outputs can have reverse action (10...0Vdc; 20...4mA; 20...0mA).

The outputs are direct, no signal conditioning is required if they are interfaced with a controller or measuring instrument.

#### DIGITAL OUTPUT

#### IK1 D



The magnetostrictive transducers of the IK1D series supply a direct Start/Stop output and an output that is RS422 compatible and a PWM (Pulse Width Modulated).

The standard resolution is 0,1mm (when a 28MHz counter is used).

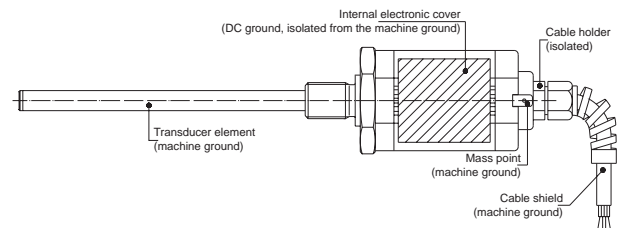
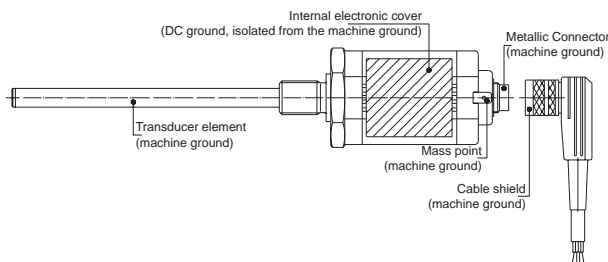
Higher resolution are possible increasing the number of cycles.

The outputs are direct, no signal conditioning is required if they are interfaced with a controller or measuring instrument.

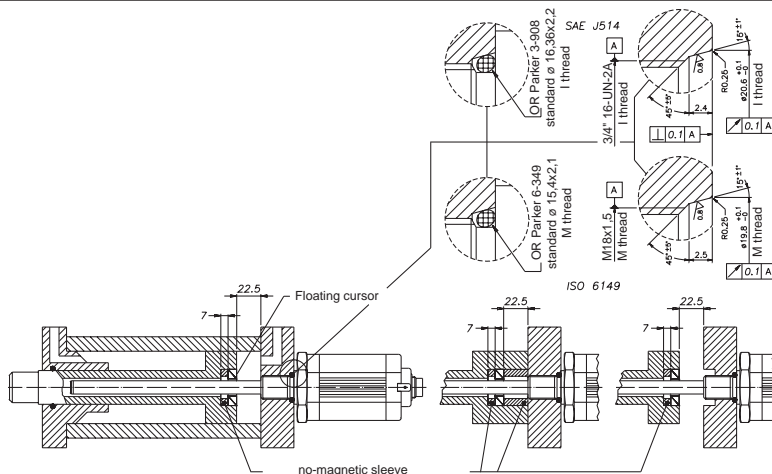
#### GROUNDING IK1 Connector output B - C

#### GROUNDING IK1

#### Wire Output F/R



#### GROUNDING IK1D Version I with isolation



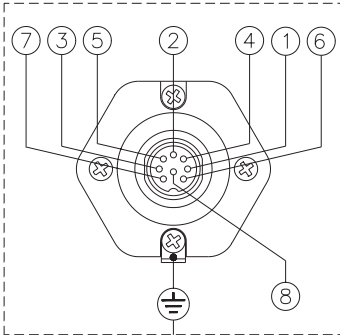
The IK magnetostrictive transducers series are beenezalized with thread M18x1,5 or 3/4" - 16 UNF.

For the internal cylinder application with high pressure, the seats must be realized as showed in the drawing. If is not possible use a not magnetic material, it's necessary insert between the cursor some not magnetic ring. For a correctly working, the cursor must be mounted in appropriately not magnetic material case with spacer bracket, and eventual cursor fix screws, must be not magnetic material too.

**ELECTRICAL CONNECTIONS IK1 A (Version I with isolation)**

**ANALOGUE Output**

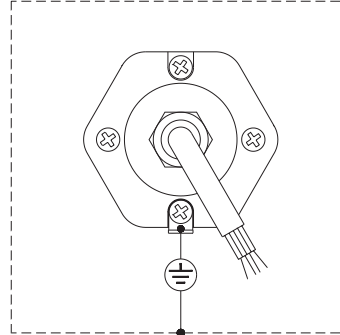
**IK1A C Output**



<u>Pin. N°</u>	<u>Function</u>
1	4...20mA 20...4mA 0...20mA 20...0mA not used for type A output
2	GND output (isolated from 6 and 7)
3	10...0Vdc
4	n.c.
5	0...10Vdc
6	DC Ground
7	Power +Vdc
8	N.C.

**WARNING!**  
Do not connected the dc ground to the electrical ground or to the cable screen

**IK1A F/R Output**



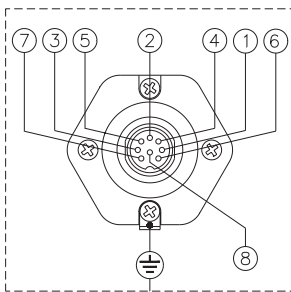
<u>Wire</u>	<u>Function</u>
Yellow	4...20mA 20...4mA 0...20mA 20...0mA not used for type A output
Grey	GND output (isolated from blue and brown)
Pink	10...0Vdc
Green	0...10Vdc
Blue	DC Ground
Brown	Power +Vdc
White	N.C.

**WARNING!**  
Do not connected the dc ground to the electrical ground or to the cable screen

**ELECTRICAL CONNECTIONS IK1 D (Version I with isolation)**

**DIGITAL Output**

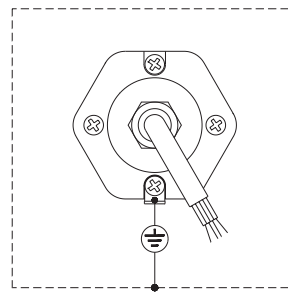
**IK1D C Output**



<u>Pin. No.</u>	<u>Function</u>
1	(+) Gate
2	(-) Gate
3	(+) Inquire
4	n.c.
5	(-) Inquire
6	DC Ground
7	Power + Vdc
8	Ref. GND I/O

**WARNING!**  
Do not connected the dc ground to the electrical ground or to the cable screen

**IK1D F/R Output**



<u>Wire</u>	<u>Function</u>
Yellow	(+) Gate
Grey	(-) Gate
Pink	(+) Inquire
Green	(-) Inquire
Blue	DC Ground
Brown	Power + Vdc
White	Ref. GND I/O

**WARNING!**  
Do not connected the dc ground to the electrical ground or to the cable screen

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice.