



MAIN CHARACTERISTICS

- Strokes from 100 to 900 mm
- Multivariable sensor with advanced diagnostic and FW upgrade via bootloader.
- Working temperature: -40...+85 °C
- IP67 protection

Contactless linear position transducer with TWIIST patented technology for longer lifetime. The absence of contact on the sensing element allows to obtain a fully-sealed, robust and compact sensor.

The high performance in terms of robustness, thermal stability and EMC immunity make the LM-C series suitable for use both in industrial and mobile hydraulic environments.

TECHNICAL DATA

Stroke (FS)	From 100 to 900 mm
Measurement	Multivariable (displacement, velocity, tilt and acceleration)*
Position reading sampling time	typ. 1 ms
Displacement speed	< 5 m/s
Resolution	typ. 14 bit
Linearity (BFSL method)	typ. < ±0.15% FS
Repeatability	typ.< 0.05% FS
Hysteresis	typ.< 0.05% FS
Tilt measurement (pitch/roll), Linearity (static meas.)	tip. < +/-0.5% FS
Temperature coefficient at 0 deg inclination	typ. < +/-0.01 deg/°C
IP Protection Level	IP67
Housing Material	AISI444 stainless steel, brass, aluminium, PA12
Shock	Impulsive on 3 axes; 40g 11 ms IEC 60068-2-27
Vibrations	12g - 10 Hz ... 2000 Hz IEC 60068-2-6
Industrial EMC	EN 61326 - 1

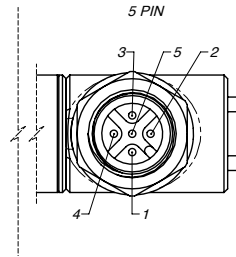
ELECTRICAL DATA

Output signal	CANopen
Circuit type	Half-redundat
Supply voltage	8...32V DC
Typical current consumption (operational state)	14 mA @ 24 VDC
Supply voltage reverse polarity protection	Up to -33 V DC
Overvoltage protection	33 V DC (continuous)
Short circuit protection	Yes
Working temperature	-40...+85 °C
Temperature coefficient	typ. < ±50 ppm/°C

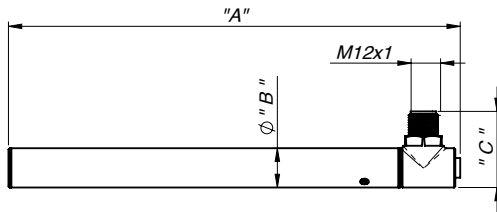
* Please refer to the installation manual for further details.

ELECTRICAL CONNECTIONS

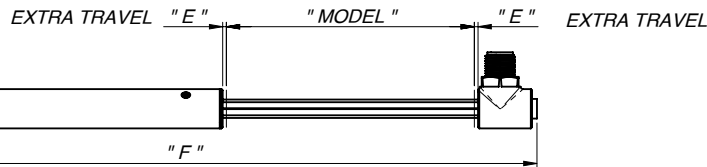
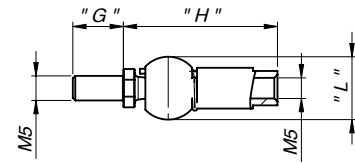
PIN	M12 5 pole connector
1	N. C. (not internally connected)
2	V+
3	V-
4	CAN_H
5	CAN_L



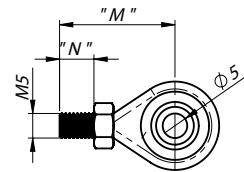
MECHANICAL DIMENSIONS



PKIT1565
PKIT1566



PKIT1567
PKIT1568



Model	"A" mm	ø "B" mm	"C" mm	"E" mm	"F" mm	"G" mm	"H" mm	"L" mm	"M" mm	"N" mm
100	184	16	31	1,5	287	10,5	32	13	23,5	7
150	234				387					
200	284				487					
250	334				587					
300	384				687					
350	434				787					
400	484				887					
450	534				987					
500	584				1087					
550	634				1187					
600	684				1287					
650	734				1387					
700	784				1487					
750	834				1587					
800	884				1687					
850	934				1787					
900	984	1887								

ORDERING CODE

Product		Accessories																
LM	- C - - -	0	- 000X	- 0	- 0	- 0X												
CANopen Output																		
<table border="1"> <thead> <tr> <th colspan="2">Connector</th> </tr> </thead> <tbody> <tr> <td>5 pole M12 output conn.</td> <td>A</td> </tr> </tbody> </table>		Connector		5 pole M12 output conn.	A													
Connector																		
5 pole M12 output conn.	A																	
<table border="1"> <thead> <tr> <th colspan="2">Model (stroke) – steps of 50mm</th> </tr> </thead> <tbody> <tr> <td>100 mm</td> <td>0100</td> </tr> <tr> <td>900 mm</td> <td>0900</td> </tr> </tbody> </table>		Model (stroke) – steps of 50mm		100 mm	0100	900 mm	0900											
Model (stroke) – steps of 50mm																		
100 mm	0100																	
900 mm	0900																	
		<table border="1"> <thead> <tr> <th colspan="2">Connectors</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>None</td> </tr> <tr> <td>1</td> <td>CON031 – 5-pin M12 female mating conn., IP67</td> </tr> <tr> <td>3</td> <td>CON041 – Angled 5-pin M12 female mating conn., IP67</td> </tr> </tbody> </table>					Connectors		0	None	1	CON031 – 5-pin M12 female mating conn., IP67	3	CON041 – Angled 5-pin M12 female mating conn., IP67				
Connectors																		
0	None																	
1	CON031 – 5-pin M12 female mating conn., IP67																	
3	CON041 – Angled 5-pin M12 female mating conn., IP67																	
		<table border="1"> <thead> <tr> <th colspan="2">Mechanical Connection Joints (PKIT)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>None</td> </tr> <tr> <td>A</td> <td>PKIT 1567 Ball joints</td> </tr> <tr> <td>B</td> <td>PKIT 1565 Axial joints</td> </tr> <tr> <td>C</td> <td>PKIT 1566 SS Axial joints (AISI316)</td> </tr> <tr> <td>D</td> <td>PKIT 1568 SS Ball joints (AISI316)</td> </tr> </tbody> </table>					Mechanical Connection Joints (PKIT)		0	None	A	PKIT 1567 Ball joints	B	PKIT 1565 Axial joints	C	PKIT 1566 SS Axial joints (AISI316)	D	PKIT 1568 SS Ball joints (AISI316)
Mechanical Connection Joints (PKIT)																		
0	None																	
A	PKIT 1567 Ball joints																	
B	PKIT 1565 Axial joints																	
C	PKIT 1566 SS Axial joints (AISI316)																	
D	PKIT 1568 SS Ball joints (AISI316)																	
		<table border="1"> <thead> <tr> <th colspan="2">Linearity certificate</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>No certificate</td> </tr> <tr> <td>L</td> <td>Certificate</td> </tr> </tbody> </table>					Linearity certificate		0	No certificate	L	Certificate						
Linearity certificate																		
0	No certificate																	
L	Certificate																	

Example: LM-C-A-0300 0-00X-A-0-0X
 Contactless linear position transducer with TWIIST technology, CANopen output, half-redundant circuit, M12 5 pole connector, stroke 300 mm, CANopen output, ball joints

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