

DIMENSIONAL INFORMATION



Dimension	in	mm	Dimension	in	mm
(1)			(2)		
(3)			(4)		
(5)			(6)		
(7)			(8)		
(Ø9)			Diameter Tolerance		

LOAD INFORMATION



Load Direction. Relative to the anti-rotation method (show load angle or provide sketch or separate drawing).

Dimension	Angle - °	
(1)		
Sketch:		



Rated Load (SWL) – The maximum operating load of the pin?

Proof Load - Interface default is 150% of SWL?

Break Load or Safety Factor?

Interface generally regard 3:1 as a minimum for general applications and 5:1 as a minimum for lifting applications. A higher Safety Factor may be required for certain applications (i.e. lifting people) or as requested by the customer.

Is the pin Bi-directional, Yes or No?

Is the pin Dual Bridge, Yes or No?

If Yes, how many cable exits, One or Two?

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Is the pin Dual Axis (XY), Yes or No?

Is the pin subjected to reversed load cycles, Yes or No?

If Yes, specify the load in each direction and the frequency of cycling.

If there is likely to be side loading, axial loading, shock loading or other unusual loading conditions please give details:

ENVIRONMENTAL INFORMATION

Operating Temperature Range?

Storage Temperature Range?

Ingress Protection Level (IP / NEMA Rating) or submersion depth?

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Type of environment e.g. Marine, Indoors, Dust, Subsea etc? Please specify:

Any nearby sources of Electro-Magnetic noise such as radio transmitters, power lines, electric motors, generators, arc welders etc, Yes or No?

Any significant vibration present, Yes or No?

Any chemicals or compounds present? If Yes, please specify:



MATERIAL INFORMATION

Required material type and grade. Interface standard is 17-4PH H1150 +1150.

LOAD PIN OUTPUT

Specify the required output:

Analog:

mV/V bridge output (Bridge Resistance 350 Ohm unless otherwise specified)

0.1-10.1 volt output Amplifier (ICA1)

0.1-5.1 volt output Amplifier (ICA2)

4-20 mA (3 wire) current output Amplifier (ICA4)

4-20 mA (2 wire) current output Amplifier (ICA5)

+/- 10 volt output Amplifier (ICA6)

Digital:

RS485 ASCII DCell Amplifier

RS485 MantraBUS DCell Amplifier

RS485 ModBus RTU DCell Amplifier

MantraCAN DCan Amplifier

CANopen DCan Amplifier

Wireless:

WTS Wireless Telemetry System

The output of the Amplifier / DCell / Telemetry unit will be scaled between zero and the rated load of the pin unless otherwise specified. Please specify different scaling if required.

CABLE EXIT

Specify whether a gland or connector is required.

If a connector is required, please specify the type. (If unspecified we will use one of our standard connectors).



Axial or Radial cable exit:



If a Radial exit is required, specify its rotational position, relative to the anti-rotation method.



Is mechanical protection of the Gland or Connector required, i.e. Recessed in the pin, bracket, cage etc., Yes or No? If Yes, please specify:

Is Hose Protection required for the cable, Yes or No? If yes, please specify the hose type and length:

Cable type required? (If unspecified we will use one of our standard screened cables.)

Cable core colors and functions? (If unspecified we will use our standard colors / functions.)



ANTI-ROTATION AND RETENTION METHODS

Keeper Plate

How many keeper plates are required 1,2, 3, or 4? Also, what positions are required A, B, C, or D?

If there is a preferred position for the keeper plate(s), please specify at which end of the pin and the angle in relation to the load direction.







If tapped holes for a keeper plate already exist in the structure, specify their size and position.



Grab Bracket

Provide dimensional information for what the bracket will grab and its position relative to the cable exit / load direction.





Anti-Rotation Block

If there is an existing anti-rotation block, specify its position, size and distance from the pin centreline. If not, state preferences for its size and position.



PIN RETENTION METHODS

In applications where a captive keeper plate is not used, some other method is required to retain the pin.





State the required calibration units.						
State the required Non-linearity and	Repeatability.	Specifications.				
See the product datasheet for standard specifications.						
Is Third Party Witnessing of calibration required, Yes or No?						
If Yes, please specify the classification society (ABS, DNV, BV etc.):						

Specify any other testing requirements such as pressure testing, crack detection, insulation testing etc.:

CERTIFICATIONS

Machinery Directive approval required, Yes or No?

Hazardous Area ATEX / IECEx protection required, Yes or No? If yes, please specify Zone and Protection type:

CE marking required, Yes or No?

Other certification required, please specify:

OTHER INFORMATION

If possible, please include the following:

1, Photographs of the load pin location and the structure around it so that we can see the space around the pin and how it is loaded.

2, If the load pin is replacing a non-instrumented pin, include a drawing or dimensions of that pin.

Notes / Comments