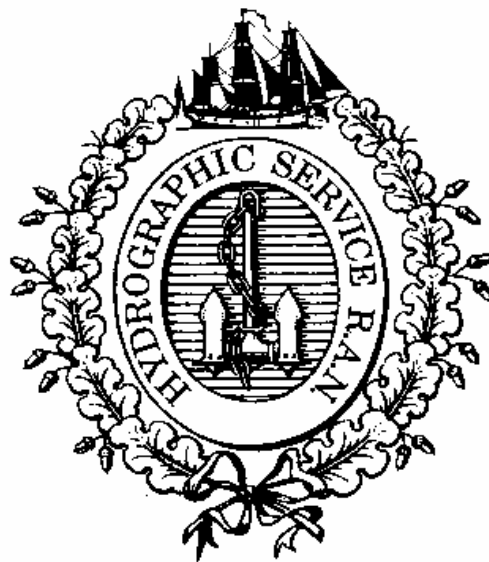


AUSTRALIAN HYDROGRAPHIC OFFICE  
MANAGEMENT SYSTEM DOCUMENT

**AHO Paper Chart Point Symbol  
Specifications**



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The version status of this document is the same for all pages			
Version	DESCRIPTION OF CHANGE	Date	Approved
V 0.1	Draft	March 2004	

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## **PURPOSE**

The purpose of this document is to specify the size of each point symbol used in the paper chart production at the AHO and provide consistency between the AHO and contractors and between different production systems used by the AHO.

## **SCOPE**

The scope of this document is to be used by the AHO in the construction of nautical paper charts symbols and is to be used by contractors as an appendix to the AHO Int1 Paper Chart Specifications.

## **REFERENCES**

- a) AHO INT1 Paper Chart Specifications
- b) German Int1 1996
- c) Chart Specifications of the IHO & Regulations of the IHO for International Charts - MP004
- d) INT3 – Micklefirth charts 90001...?
- e) INT2 - Borders

## **DEFINITIONS**

- a) ...?
- b) ...?

## **RESPONSIBILITIES**

- a) Product Generation to maintain the specification
- b) Capability Integration to provide technical support in maintaining specification

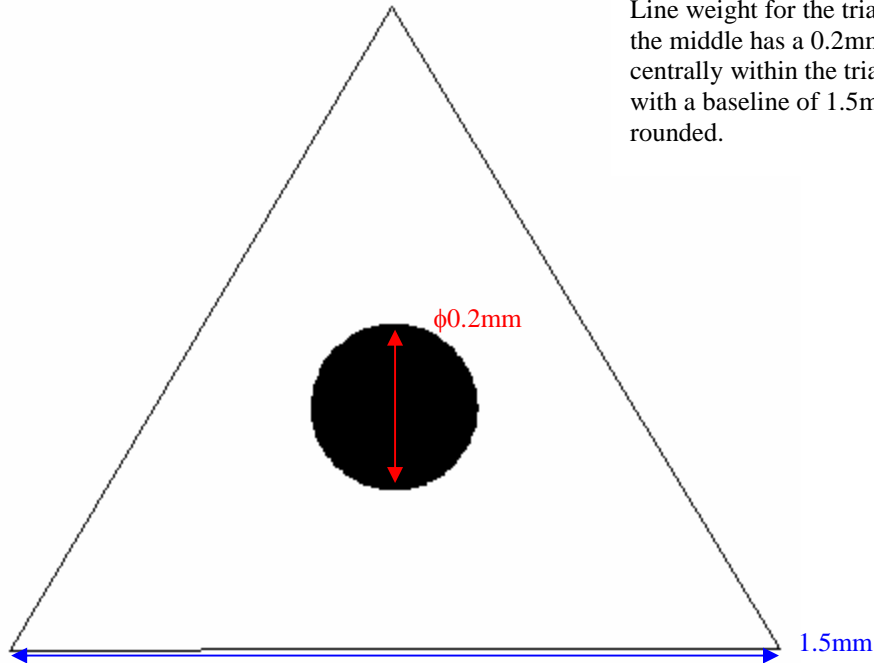
## **How the Symbols are described**

The dimensions are in metric units. The symbols have been described without line weight applied. When the line weight is applied the actual size of the symbol will increase between 50-100% of the line weight. All symbol colours are black unless otherwise stated.

SPECIFICATIONS

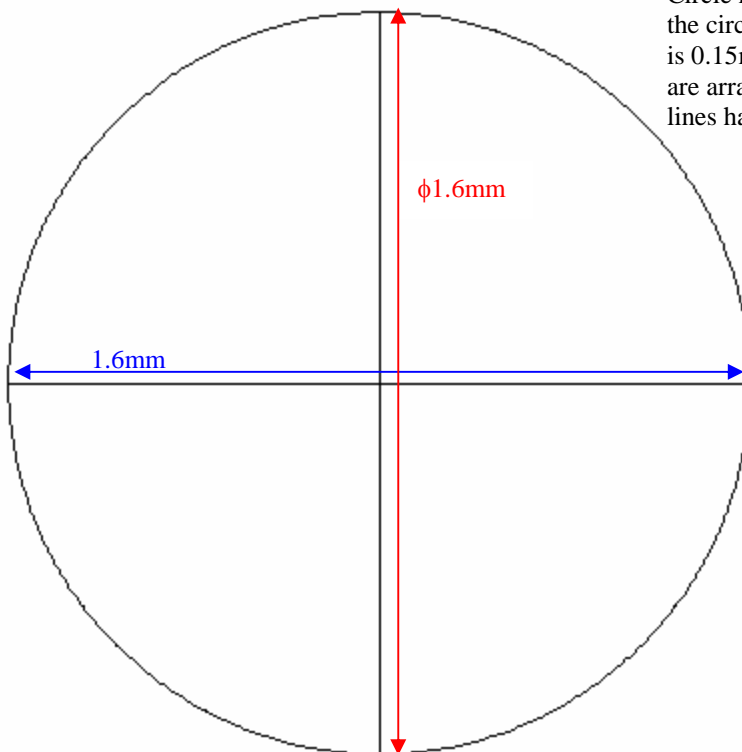
**Section IB – Positions, Distances, Directions, Compass**

Int1 IB 20 – Triangulation point



Line weight for the triangle is 0.15mm. The circle in the middle has a 0.2mm diameter and is placed centrally within the triangle. Triangle is equilateral with a baseline of 1.5mm. Corners of the triangle are rounded.

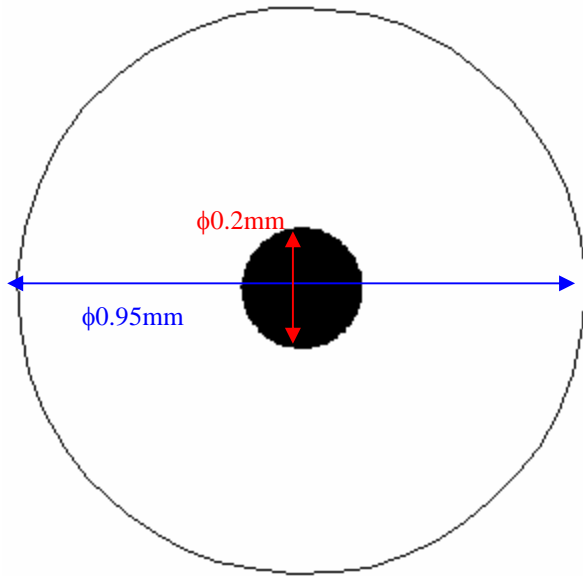
Int1 IB 21 – Observation Point



Circle has a diameter of 1.6mm. Line weight for the circle is 0.15mm. Line weight for the cross is 0.15mm. Cross lines are 1.6mm in length and are arranged vertically and horizontally. All lines have square ends.

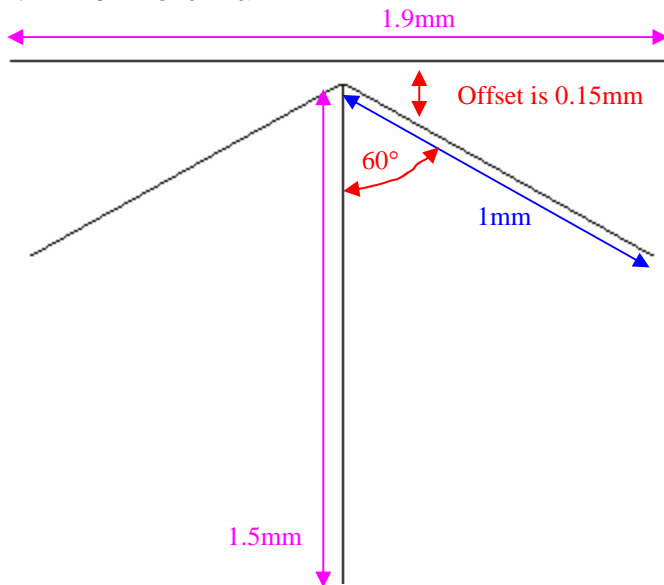


Int1 IB 22 – Fixed point



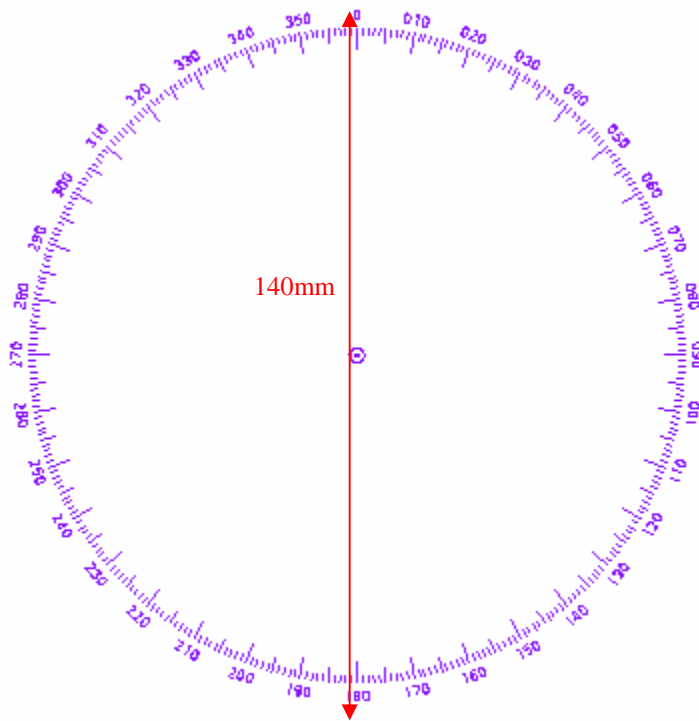
Line weight for the outer circle is 0.1mm. Inner circle has a solid fill and a 0.2mm diameter. Outer circle has a 0.95mm diameter.

Int1 IB 23 – Benchmark



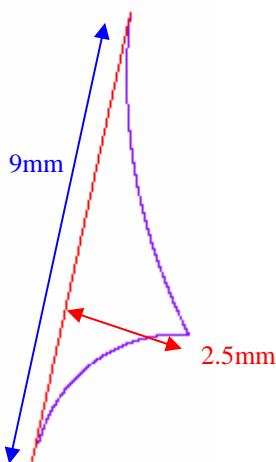
Line weight for all the lines is 0.15mm. The headbar is 1.9mm long. The arrowhead is offset from the headbar at the centre by 0.15mm. Arrow lines have a length of 1mm and are flared 60° from the shaft. Length of arrow shaft is 1.5mm. All lines have square ends.

Int1 IB70 – Compass Rose, normal pattern (smaller patterns of compass rose may be used)



Symbol colour is magenta. Diameter of rose is 140mm to the outside of the degree numbers. Solid dot at centre has a diameter of 0.5mm. Circle surrounding centre dot has a line weight of 0.2mm and a diameter of 2.7mm. 10° long ticks have a line weight of 0.2mm and a length of 5mm. 5° medium ticks have a line weight of 0.2mm and a length of 3.5mm. 1° short ticks have a line weight of 0.125mm and a length of 1.5mm. 10° labels are 7pt medium and are offset from outer end of the 10° ticks by 0.6mm. Compass rose is also available in a 110mm-diameter version. All lines have square ends.

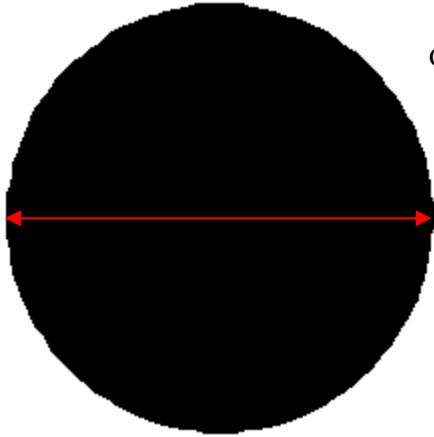
Int1 IB70 – Compass Rose Arrowhead.



Symbol is used as the arrowhead on the end of the magnetic variation line on the compass rose. Refer to the AHO line specification for magnetic variation line. Symbol colour is magenta and has a line weight of 0.175mm, which is the same as the magnetic variation line. Arrowhead is 9mm in length and is 2.5mm wide at its widest point. All lines have square ends.

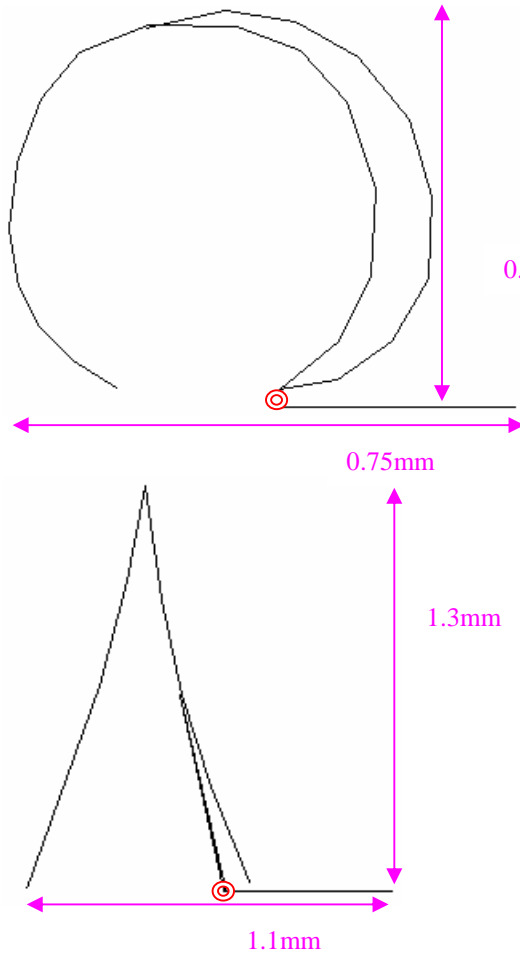
**Section IC – Natural Features**

Int1 IC 11 – Spot Height



Circle has a 0.325mm diameter with a solid black fill.

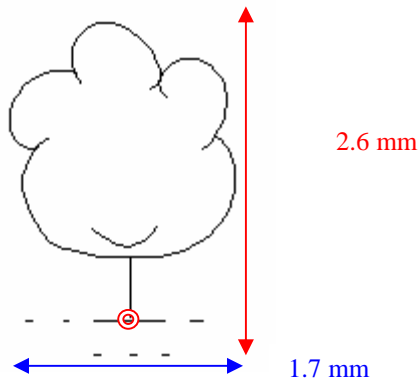
Int1 IC 30 – Wood, in general



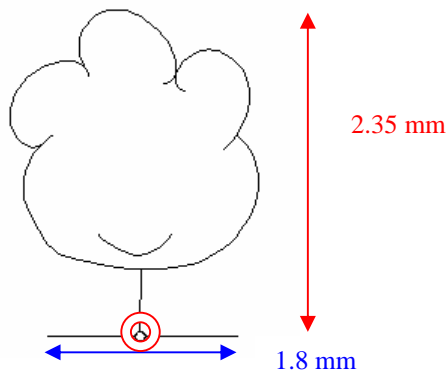
Symbol has a line weight of 0.1mm. Height is 0.75mm and length is 1.0mm. The insertion point is at the red point on diagram. Lines have square ends.

Symbol has a line weight of 0.1mm. Height is 1.3mm and length is 1.2mm. The insertion point is at the red point on diagram. Lines have square ends.

Int1 IC 31.1 – Deciduous tree

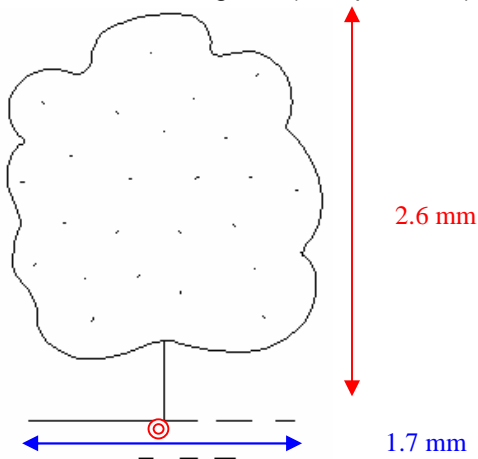


Overall size of point symbol is 1.7mm wide and 2.5mm tall, from the bottom baseline, with a line weight of 0.1mm. Bottom line is offset down from the top line by 0.25mm. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.

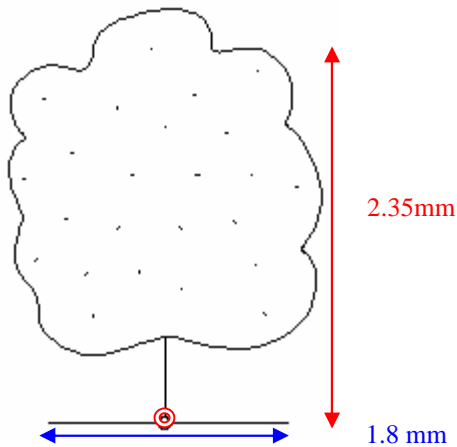


Overall size of point symbol is 1.7mm wide and 2.35mm tall, from the baseline, with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 31.2 – Evergreen (except conifer)

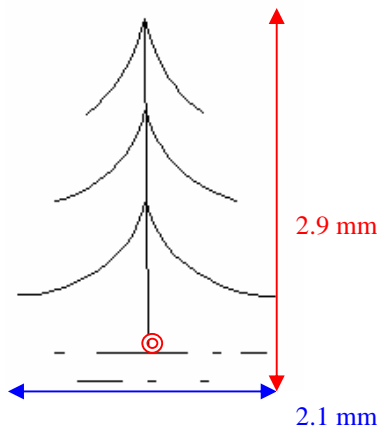


Overall size of point symbol is 1.7mm wide and 2.6mm tall, from the bottom baseline, with a line weight of 0.1mm. Bottom line is offset down from the top line by 0.25mm. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.

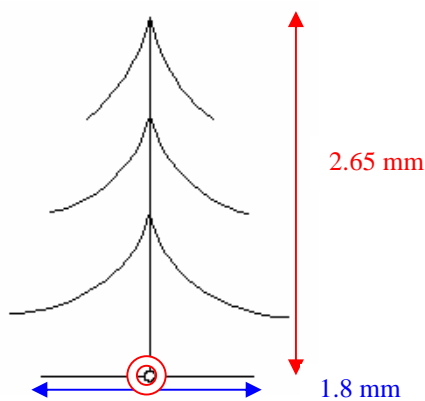


Overall size of point symbol is 1.7mm wide and 2.35mm tall, from the baseline, with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 31.3 - Conifer

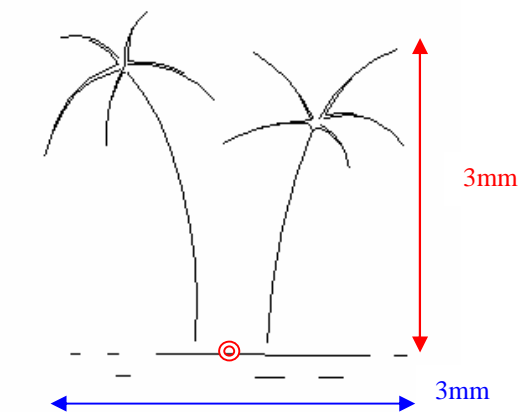


Overall size of point symbol is 2.1mm wide and 2.9mm tall, from the bottom baseline, with a line weight of 0.1mm. Bottom line is offset down from the top line by 0.25mm. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.

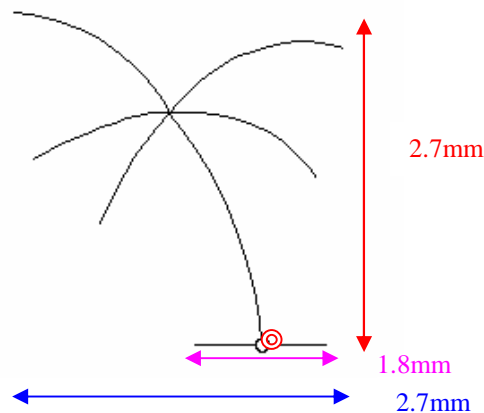


Overall size of point symbol is 2.1mm wide and 2.65mm tall, from the baseline, with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 31.4 - Palm

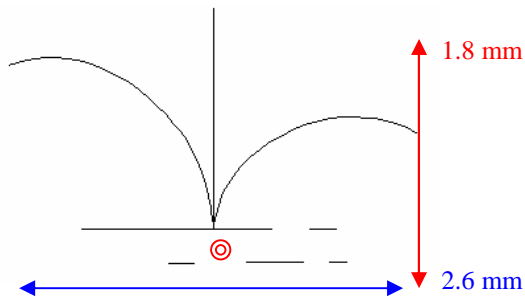


Overall size of point symbol is 3mm wide and 3mm tall, from the bottom baseline, with a line weight of 0.1mm. Bottom line is offset down from the top line by 0.2mm. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.

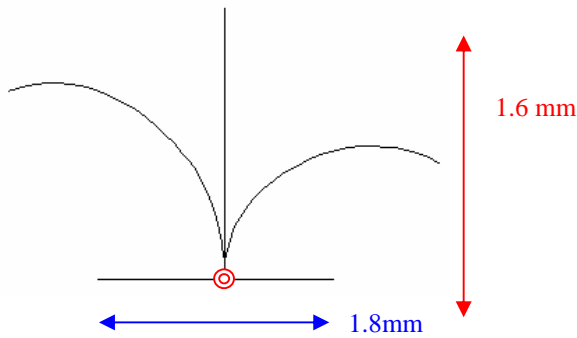


Overall size of point symbol is 2.7mm wide and 2.7mm tall, from the baseline, with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 31.5 –Nipa Palm

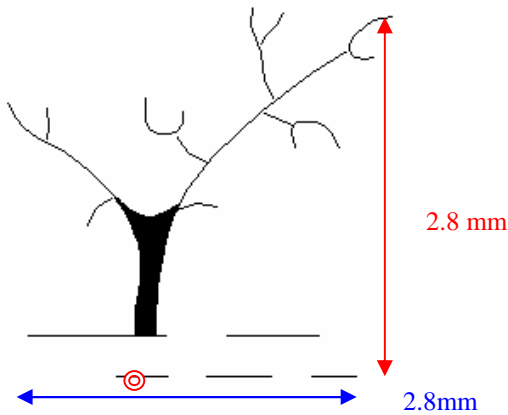


Overall size of point symbol is 2.6mm wide and 1.8mm tall, from the bottom baseline, with a line weight of 0.1mm. Bottom line is offset down from the top line by 0.2mm. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.

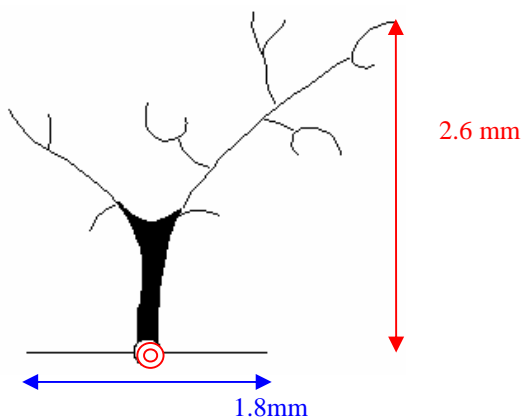


Overall size of point symbol is 2.6mm wide and 1.6mm tall with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 31.6 - Casuarina

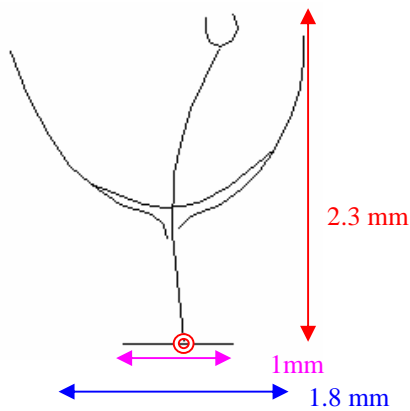


Overall size of point symbol is 2.8mm wide and 2.8mm tall, from the bottom baseline, with a line weight of 0.1mm. Bottom line is offset down from the top line by 0.2mm. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.

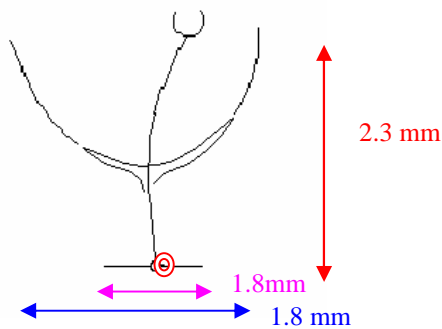


Overall size of point symbol is 2.8mm wide and 2.6mm tall with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 31.7 - Filao

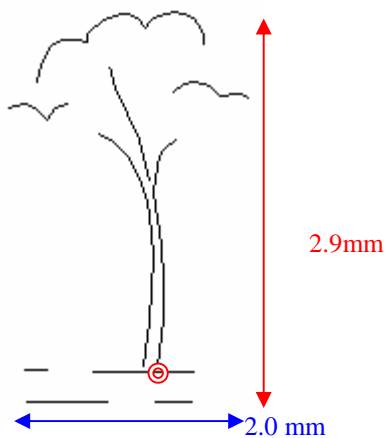


Overall size of point symbol is 1.8mm wide and 2.3mm tall with a line weight of 0.1mm. baseline is 1mm in length. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.

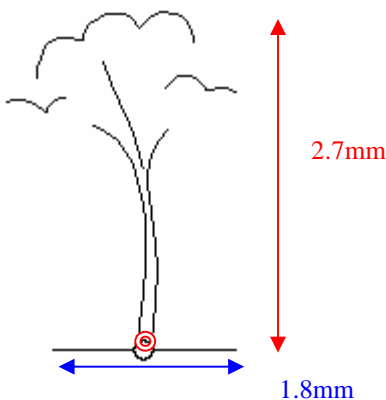


Overall size of point symbol is 2.5mm wide and 2.5mm tall with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 31.8 - Eucalypt

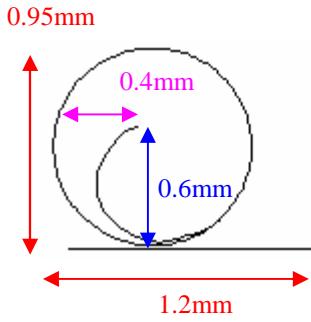


Overall size of point symbol is 2.0mm wide and 2.9mm tall, from the top baseline, with a line weight of 0.1mm. Bottom line is offset down from the top line by 0.2mm. Insertion point is at the base of the trunk as indicated on diagram. Lines have square ends.



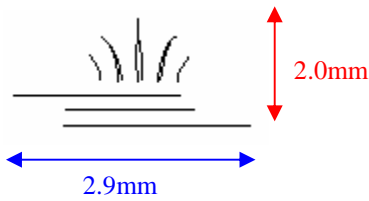
Overall size of point symbol is 2.0mm wide and 2.7mm tall with a line weight of 0.1mm. Insertion point is at the base of the trunk as indicated by circle. Diameter of base circle is 0.5mm, and the baseline is 1.8mm long. Lines have square ends.

Int1 IC 32 – Mangrove

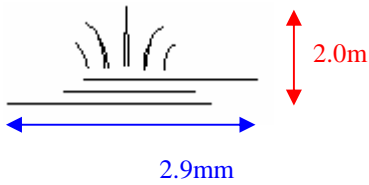


Line weight of symbol is 0.1mm. Baseline of the symbol is 1.2mm in length. Circle has a diameter of 0.95mm and intercepts the baseline 0.5mm from the left end. Arc that passes through the centre starts to the right of the bottom of the circle and arcs up to a point 0.8mm from the baseline and 0.4mm from the left end. Lines have square ends.

Int1 IC 33 – Marsh



Overall size of the symbol is 2.9mm wide and 2.0mm tall from the bottom baseline. Lineweight of the symbol is 0.125mm. Distance between top baseline and bottom baseline is 0.6mm. Lines have square ends.

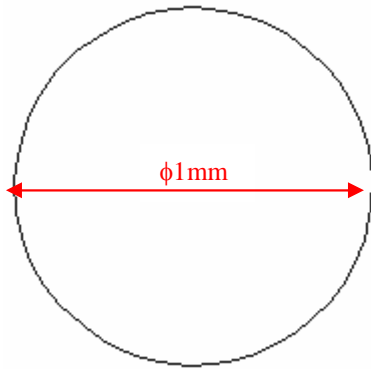


Overall size of the symbol is 2.9mm wide and 2.0mm tall from the bottom baseline. Lineweight of the symbol is 0.125mm. Distance between top baseline and bottom baseline is 0.6mm. Lines have square ends.



**Section ID – Cultural Features**

Int1 ID 3 - Settlement



Line weight for the line is 0.1mm.  
Colour for the symbol is black.

Int1 ID 4 – Inland Village

See IE 10.1 - Church

Int1 ID 5 – Building (also ID 4 – Inland village, IE34.1 – Fortified structure (on larger scale charts))



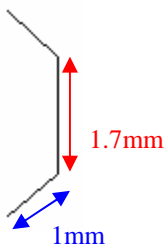
Symbol is 1.0mm wide by 1.0mm high. The symbol has a solid black fill.

Int1 ID 13 – Railway, with station



Symbol is 2.95mm wide by 0.65mm high. The symbol has a solid fill.

Int1 ID 16 – Tunnel symbol



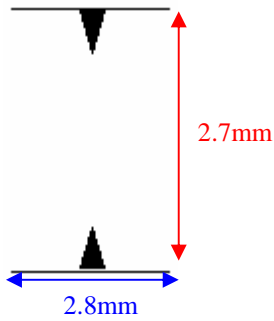
Symbol lineweight is 0.15mm. Length of vertical section is 1.7mm and the ends are 1mm splayed at 45°. Overall length is 3.5mm. Symbol has square ends.

Int1 ID 17 – Airport, Airfield



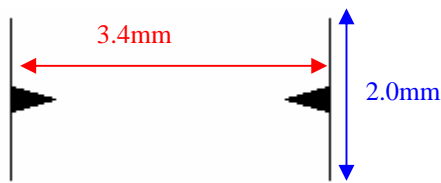
Line weight is 0.15mm and the circle diameter is 4.5mm. The airplane is 3.875mm in width and height.

Int1 ID 20 – Vertical clearance



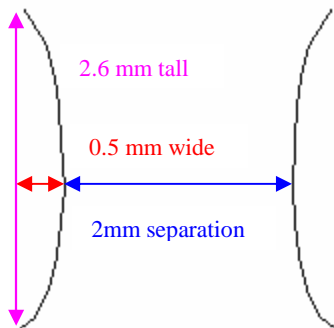
Lineweight for symbol is 0.1mm. Distance between baselines is 2.7mm. Length of lines on top and bottom is 2.8mm. Triangles are black fill, base 0.3mm, height 0.4mm. Triangles are offset 0.05mm from top and bottom lines. Lines have squared ends.

Int1 ID 21 – Horizontal clearance



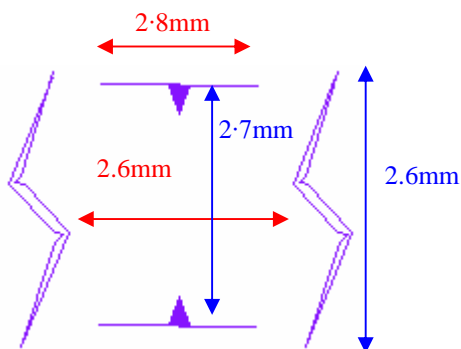
Lineweight for symbol is 0.1mm. Distance between side lines is 2.6mm, which caters for a 2 character horizontal clearance. Length of lines on left and right is 2.0mm. Triangles are black fill, base 0.3mm, height 0.4mm. Triangles are offset 0.05mm from side lines. Lines have squared ends.

Int1 ID 23 – Opening bridge



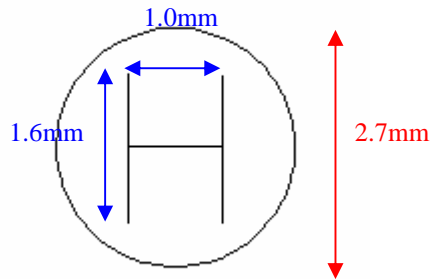
Symbol has a line weight of 0.15mm. Each curve is 2.6mm high and 0.5mm wide. The separation distance between the two curved lines is 2.0mm. Lines have squared ends.

Int1 ID 26 – Power transmission line safe overhead clearance.



Symbol colour is magenta. Lineweight for symbol is 0.15mm. Distance between electric flashes is 2.6mm, which caters for a 2 character vertical clearance. Length of electric flashes is 2.6mm. Length of lines on top and bottom is also 2.8mm. Triangles are magenta fill, base 0.3mm, height 0.4mm. Triangles are offset 0.05mm from top and bottom lines. Lines have squared ends.

Int1(Chart 5011) ID b – Helicopter Landing Site

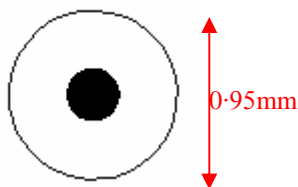


Circle has a lineweight of 0.125mm. Diameter of circle is 2.7mm. Letter 'H' has a lineweight of 0.25mm and possesses the following dimensions: 1.6mm high and 1.0mm wide. All lines in letter 'H' have square ends.

**Section IE - Landmarks**

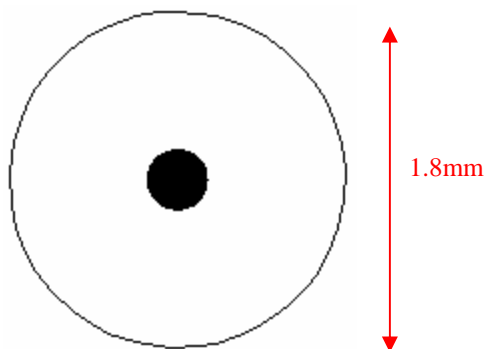
Int1 IE 1 – Example of landmark

(Symbol is identical to IB 22 Fixed Point)



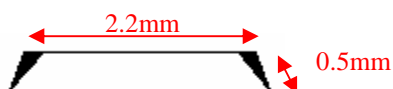
Outer circle has diameter of 0.95mm, with a lineweight of 0.1mm. Inner circle is solid filled with a diameter of 0.2mm.

Int1 IE 2 – Example of conspicuous landmark



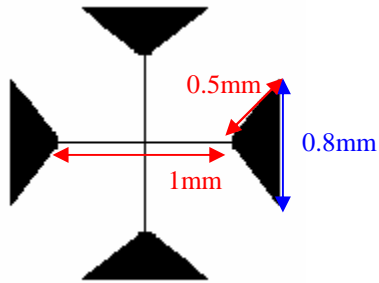
Outer circle has diameter of 2.0mm, with a lineweight of 0.15mm. Inner circle is solid filled with a diameter of 0.3mm

Int1 IE 5 – Height of structure



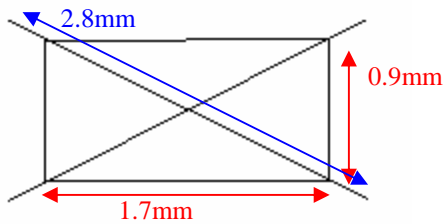
Top line has a length of 2.2mm and a lineweight of 0.1mm. Triangles on the side are solid filled and angled 45° down from the top line. They have a length of 0.5mm and are 0.2mm thick at the top line. Lines have square ends.

Int1 IE 10 – Church



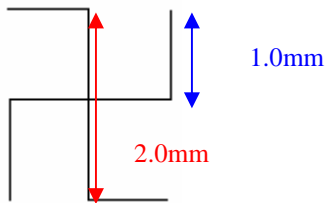
Symbol has a line weight of 0.1mm. The cross lines are 1mm in length. Each triangle is filled black and is isosceles. Base of each triangle is 0.8mm and side lengths are 0.5mm. All lines have square ends.

Int1 IE 13 – Temple (also IE 14 – Pagoda, IE 15 – Shinto shrine, Josshouse, IE 16 – Buddhist temple)



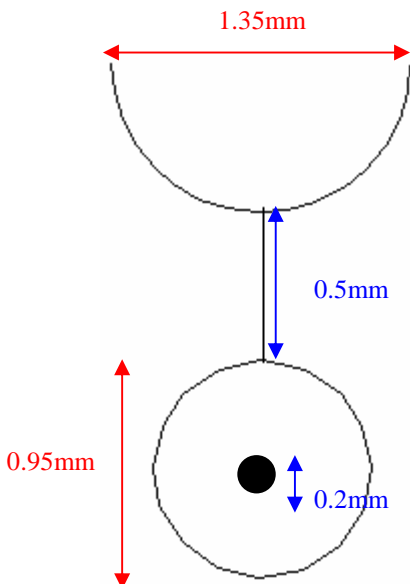
Symbol has a line weight of 0.15mm. The rectangle is 1.7mm wide by 0.9mm high. The cross lines are 2.8mm in length with square ends. They pass through the corners of the rectangle.

Int1 IE 16 - Buddhist temple option b



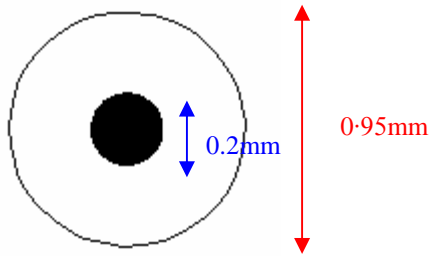
Line weight of 0.15mm. Cross lines are 2.0mm in length. End lines are 1.0mm in length. Symbol has square ends.

Int1 IE 17 – Mosque, minaret



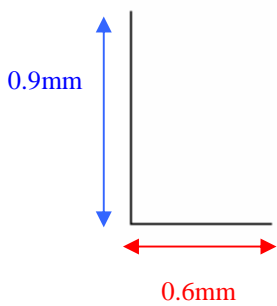
Symbol is mounted centrally above and adjoining a fixed point position circle (see IB 22). The symbol comprises a shaft of length 0.5mm with a semi-circle of 1.35mm mounted above. The line weight for the shaft and semi-circle is 0.15mm. All lines have square ends.

Int1 IE 18 – Marabout (see Fixed Point Position Circle INT IB 22)



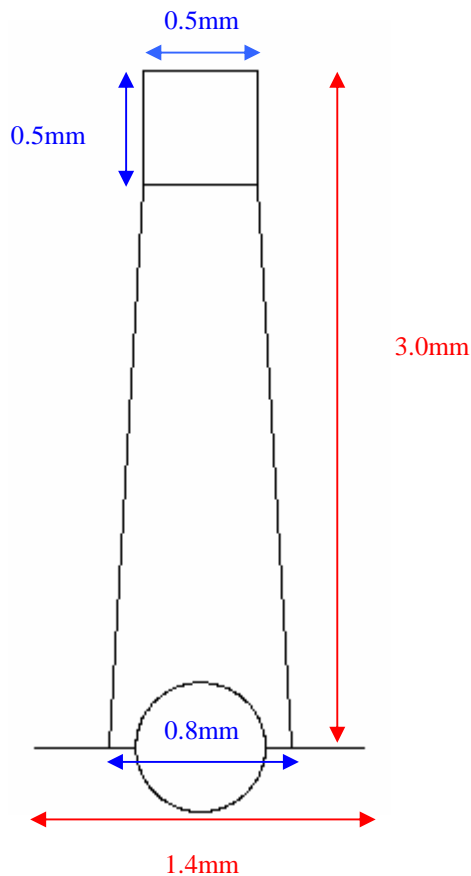
Outer circle has diameter of 0.95mm, with a line weight of 0.1mm. Inner circle is solid filled with a diameter of 0.2mm.

Int1 IE 19 – Cemetery



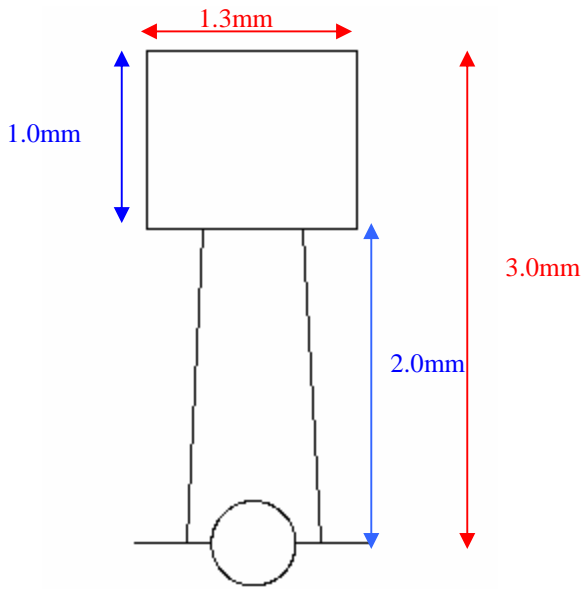
Symbol has a line weight of 0.1mm. The symbol is 0.6mm wide and 0.9mm high. All lines have square ends.

Int1 IE 20 – Tower



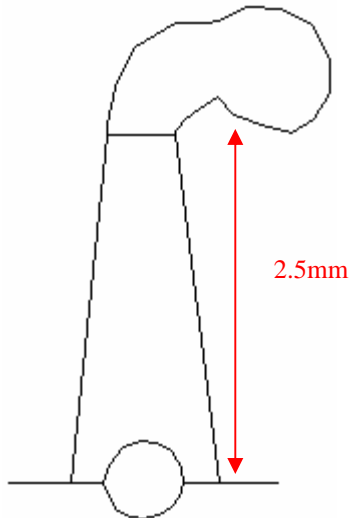
Symbol baseline has a line weight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Tower is 3mm in height, from the baseline, with a line weight of 0.125mm. Width of tower is 0.8mm at the bottom and 0.5mm at the top. Top square is 0.5mm x 0.5mm. All lines have squared ends.

Int1 IE 21 – Water tower, Water tank on tower



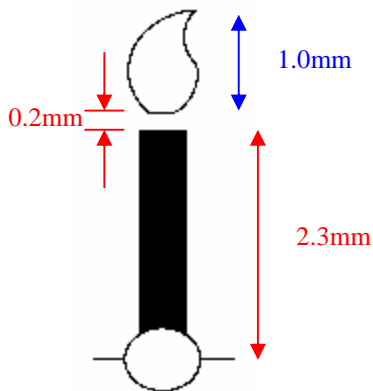
Symbol baseline has a lineweight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Tower is 3mm in height, from the baseline, with a lineweight of 0.125mm. Width of tower is 0.8mm at the bottom and 0.6mm at the top. Top square is 1.3mm x 1.0mm. All lines have squared ends.

Int1 IE 22 - Chimney



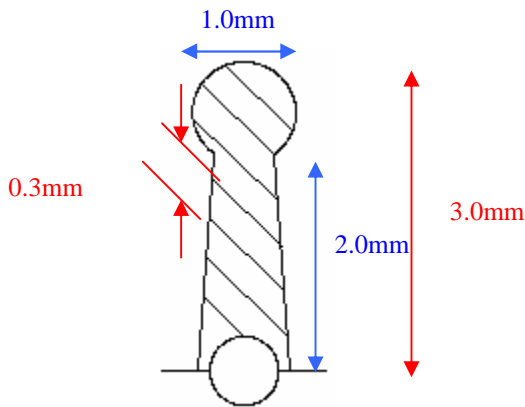
Symbol baseline has a lineweight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Tower is 2.5mm in height, from the baseline to the top of chimney, with a lineweight of 0.125mm. Width of tower is 0.8mm at the bottom and 0.5mm at the top. Smoke lineweight is 0.1mm. All lines have squared ends.

Int1 IE 23– Flare stack (on land)



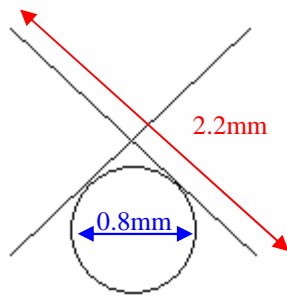
Symbol baseline has a lineweight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Tower is 2.3mm in height by 0.4mm in width, from the baseline to the top of chimney, with solid fill. Flare lineweight is 0.1mm and has a height of 1.0mm. It is offset from the chimney by 0.2mm. All lines have squared ends.

Int1 IE 24 – Monument



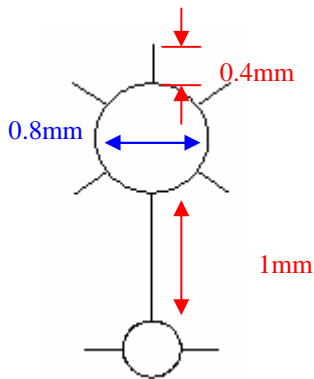
Symbol baseline has a line weight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Tower is 3.0mm in height, from the baseline, with a line weight of 0.15mm. Width of tower is 0.8mm at the bottom and 0.6mm at the top before the circle. Top circle has a diameter of 1.0mm. Hatching line weight is 0.1mm and spaced at intervals of 0.3mm, angled at 45°. All lines have square ends.

Int1 IE 25 – Windmill



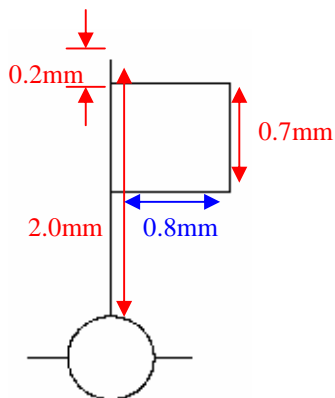
Line weight for symbol is 0.2mm. Cross lines are 2.2mm length, angled at 45° to the horizontal and crossing at 90°. Diameter of circle is 0.8mm and circumference of circle sits flush with cross lines. All lines have square ends.

Int1 IE 26 – Windmotor



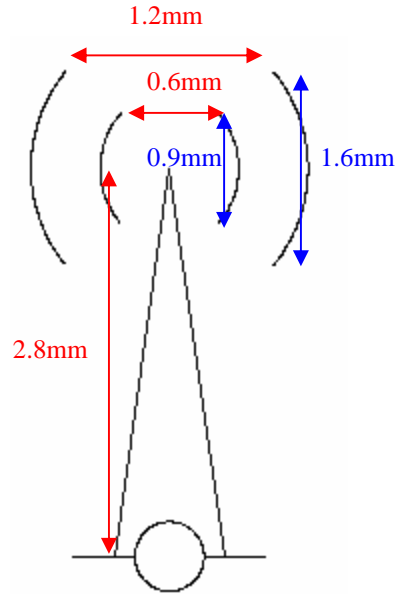
Symbol baseline has a line weight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Centre line has a line weight of 0.1mm and a length of 1.0mm from the top of the bottom circle. Top circle has a line weight of 0.15mm and a diameter of 0.8mm. Top lines have a line weight of 0.15mm and a length of 0.4mm. They are angled 45° and 90° from the horizontal. All lines have square ends.

Int1 IE 27 – Flagstaff, Flagpole



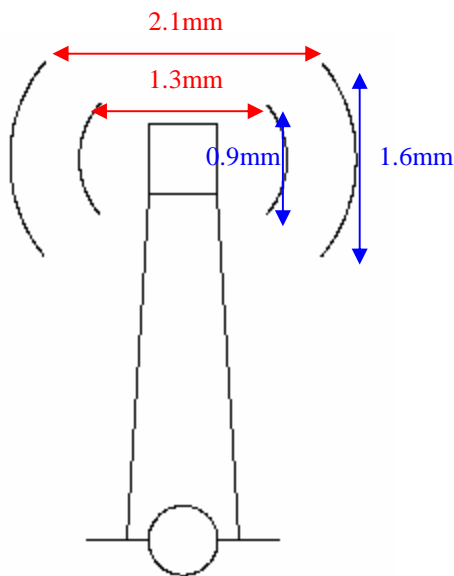
Symbol baseline has a line weight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Line weight of staff is 0.15mm and is 2.0mm in length from the top of the bottom circle. Flag line weight is 0.1mm and starts 0.2mm from the top of the staff. Flag is 0.7mm x 0.8mm. All lines have square ends.

Int1 IE 28 – Radio mast, Television mast



Symbol baseline has a line weight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Tower is 2.8mm in height, from the baseline, with a line weight of 0.15mm. Width of tower is 0.8mm at the bottom and comes together at the top. Radiation lines at top are 0.9mm and 1.6mm in length respectively, and are placed 0.6mm and 1.2mm apart respectively. They have a line weight of 0.1mm. All lines have square ends.

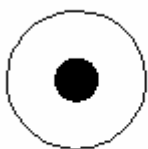
Int1 IE 29 – Radio tower, Television tower



Symbol baseline has a line weight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Tower is 3mm in height, from the baseline, with a line weight of 0.15mm. Width of tower is 0.8mm at the bottom and 0.5mm at the top. Top square is 0.5mm x 0.5mm. Radiation lines at top are 0.9mm and 1.6mm in length respectively, and are placed 1.3mm and 2.1mm apart respectively. They have a line weight of 0.1mm. All lines have square ends.

Int1 IE 30 – Radar mast, Radar tower, Radar scanner, Radar dome

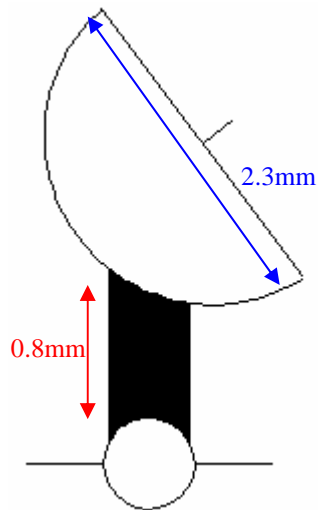
(See IB 22 Fixed Point)



Line weight for symbol is 0.1mm. Inner circle has a solid fill and a 0.2mm diameter. Outer circle has a 0.95mm diameter. The insertion point is the center of the circle.



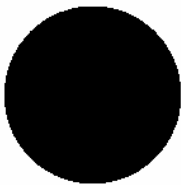
Int1 IE 31 – Dish aerial



Symbol baseline has a line weight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Structure should be solid fill. Structure is 0.8mm high, from the top of the circle to the bottom of the dish, and 0.4mm wide. Dish line weight is 0.1mm. Semi-circle circumference is 2.3mm and cut line runs at 45° to the horizontal. Radar line is 0.4mm in length with line weight of 0.1mm

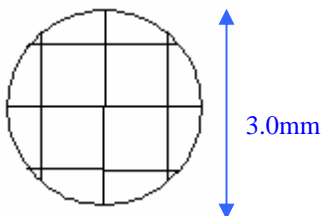
Int1 IE 32 – Tanks

Option a

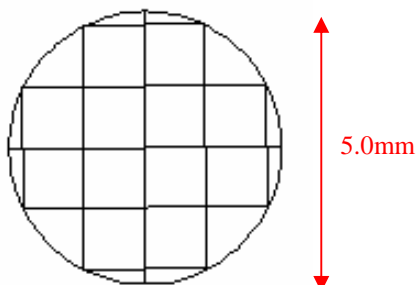


Black solid fill circle with 2mm diameter.

Option b

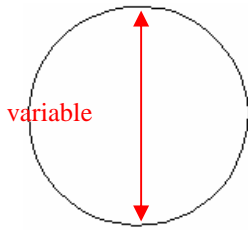


Tank has an outer circle diameter of 3.0mm with a line weight of 0.2mm. Hatching has a line weight of 0.1mm and is spaced 1mm apart in both directions. All lines have square ends.



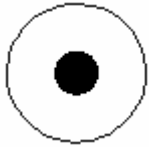
Tank has an outer circle diameter of 5.0mm with a line weight of 0.2mm. Hatching has a line weight of 0.1mm and is spaced 1mm apart in both directions. All lines have square ends.

Int1 IE 33 – Silo  
Option a



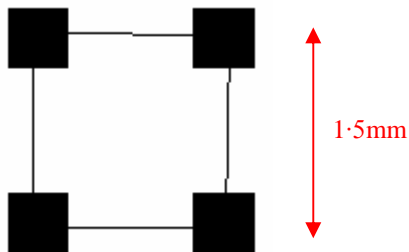
Circle has a lineweight of 0.2mm and a diameter is variable

Option b (Fixed position circle is used – see IB 22)



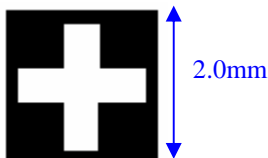
Outer circle has diameter of 1.0mm, with a lineweight of 0.1mm. Inner circle is solid filled with a diameter of 0.2mm.

Int1 IE 34.2 – Castle, Fort, Blockhouse (on smaller-scale charts)



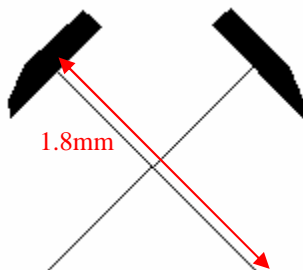
Size of middle square is 1.5mm by 1.5mm. Lineweight of middle square is 0.15mm. Outer squares are solid black fill with dimensions 0.8mm by 0.8mm. Centre of outer squares is on the corners of the middle square.

Int1 IE 34.3 – Battery, Small fort (on smaller-scale charts)



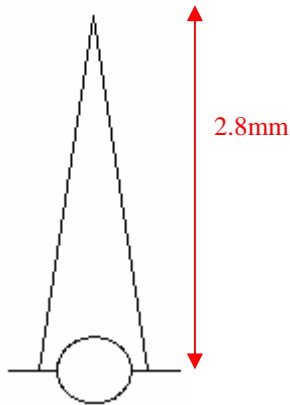
Black solid square is 2.0mm by 2.0mm. The white cross measures 1.4mm in length and width and is 0.3mm thick.

Int1 IE 35 – Quarry (on smaller-scale charts), (also IE36 – Mine)



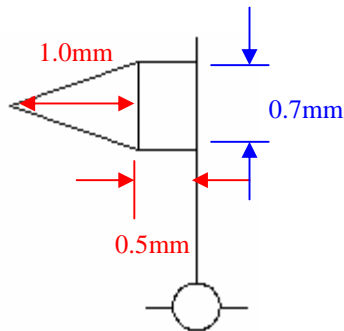
Lineweight of cross lines is 0.2mm. The lines are 1.8mm in length and are angled at 45° to the horizontal. Picks are 1mm wide and 0.4mm high, solid fill black. All lines have square ends.

Int1 IE A – Pinnacle Mast



Symbol baseline has a lineweight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Tower is 2.8mm in height, from the baseline, with a lineweight of 0.15mm. Width of tower is 0.8mm at the bottom and comes together at the top. All lines have square ends.

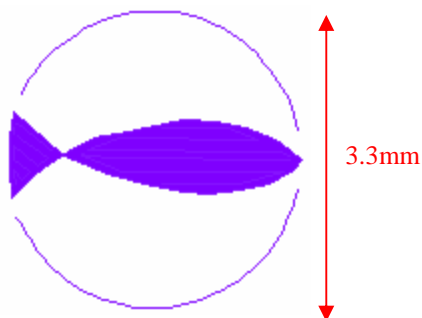
Int1 IE B – Wind sock



Symbol baseline has a lineweight of 0.1mm and length of 1.4mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Lineweight of staff is 0.15mm and is 2.0mm in length from the top of the bottom circle. Sock lineweight is 0.1mm and starts 0.2mm from the top of the staff. Square is 0.7mm x 0.5mm. The triangle is 1.0mm in length from the side of the rectangle. All lines have square ends.

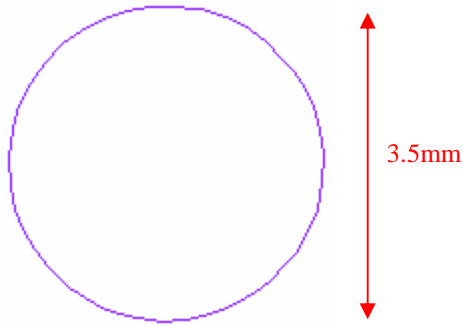
**Section IF - Ports**

Int1 IF 10 – Fishing harbour



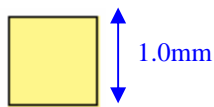
Symbol colour is magenta. Outer circle has a lineweight of 0.175mm and a diameter of 3.3mm. The circle is gapped for magenta fish and the lines have square ends. Fish is 3.3mm in length. All lines have square ends.

Int1 IF 19 – Designation of berth



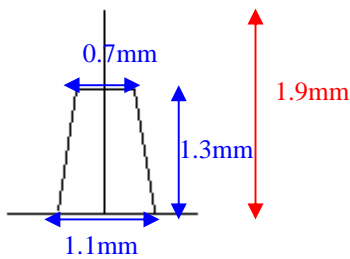
Symbol colour is magenta. Circle has a lineweight of 0.2mm and a diameter of 3.5mm

Int1 IF 20 – Dolphin



Dolphin dimensions are 1.0mm x 1.0mm. Lineweight is 0.15mm. Dolphin square has solid buff fill. All lines have square ends.

Int1 IF 21 – Deviation dolphin



Baseline is 1.7mm long with a lineweight of 0.1mm. Centre line is 1.9mm high and has a lineweight of 0.15mm. Tower is 1.1mm wide at the baseline and 0.7mm at the top. Top line is 1.3mm from the baseline. All tower lines have 0.1mm lineweights. All lines have square ends.

Int1 IF 22 – Minor post or pile



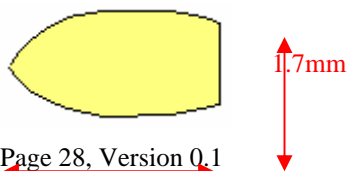
Circle has solid black fill. Diameter of circle is 0.5mm

Int IF 27 Lock Symbol for Wet Dock

The symbols are 2·3mm apart with a line-weight of 0·15mm. The internal angle is 120°.



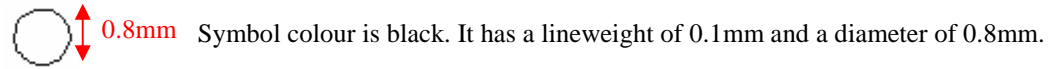
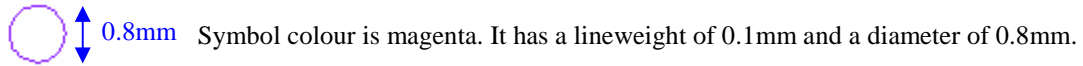
Int1 IF 34 – Hulk



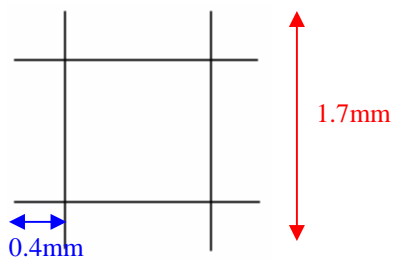
Symbol has 0.15mm lineweight and has solid buff fill. Dimensions are 1.7mm wide by 5.7mm long.

5.7mm

Int1 IF 40 – Distance mark

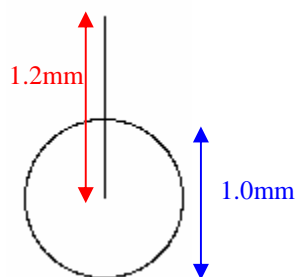


Int1 IF 52 – Timber yard



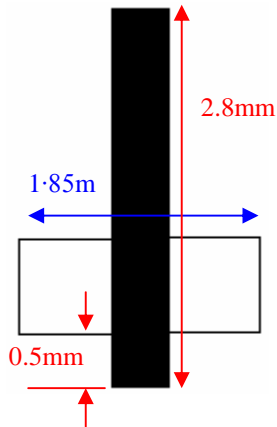
Symbol lineweight is 0.2mm. Length of lines is 1.7mm. Lines cross over 0.4mm from the end of each line. All lines have square ends.

Int1 IF 53.1 – Crane with lifting capacity



Symbol lineweight is 0.1mm. Circle diameter is 1.0mm. Line length is 1.2mm and extends from centre of circle. All lines have square ends.

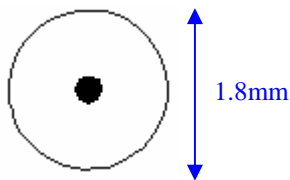
Int1 IF 53.2 – Container crane with lifting capacity



The open rectangle has a line weight of 0.1mm and is 1.85mm wide and 0.8mm high. The black filled rectangle is solid fill with dimensions 0.6mm wide and 2.8mm high. Lower side of open rectangle is offset 0.5mm from the bottom of the filled rectangle. All lines have square ends.

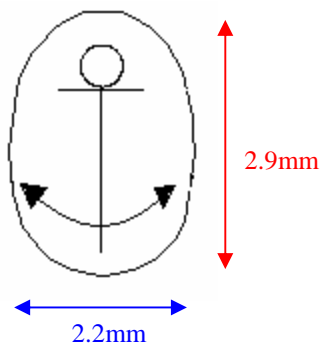
Int1 IF 53.3 – Sheerlegs (conspicuous)

Represented by Conspicuous Object Fixed Point Position Circle IB 32



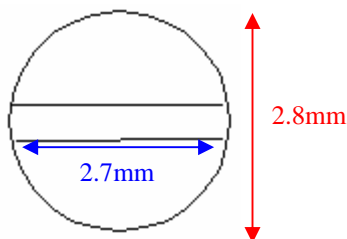
Outer circle has diameter of 1.8mm, with a line weight of 0.15mm. Inner circle is solid filled with a diameter of 0.2mm

Int1 IF 60 – Harbour - master's office



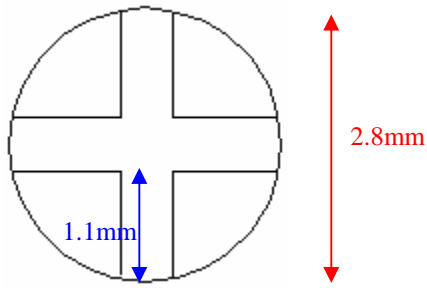
Outer oval line weight is 0.15mm and is 2.9mm high by 2.2mm wide. The anchor line weight is 0.1mm. Centre shaft is 1.7mm long and the cross line at the top is 1.0mm long. Top circle diameter is 0.4mm and sits flush with the cross line. Bottom arc is 1.5mm in length along a circle of diameter 1.5mm. Triangles are equilateral with solid black and a side length of 0.3mm. All lines have square ends.

Int1 IF 61 – Custom Office



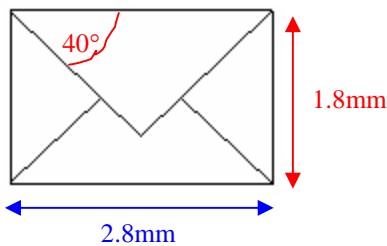
Outer circle has a line weight of 0.15mm with a diameter of 2.8mm. Cross lines are parallel to the horizontal with a line weight of 0.1mm. They are 2.7mm long and 0.5mm apart being centre aligned to the circle. All lines have squared ends.

Int1 IF 62 – Health Office, Hospital



Outer circle has a line weight of 0.15mm with a diameter of 2.8mm. Cross lines are parallel to the horizontal and vertical with a line weight of 0.1mm. Each line is 1.1mm long from the outer circle. They are spaced 0.6mm apart and meet to form a hollow cross. All lines have squared ends.

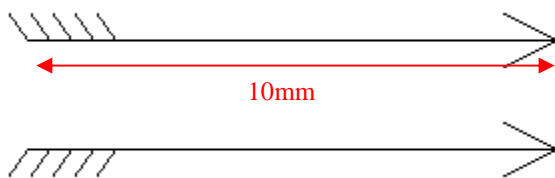
Int1 IF 63 – Post Office



Outer rectangle has a line weight of 0.15mm and is 1.8mm in height and 2.8mm in length. Lines in the centre have a line weight of 0.1mm and are angled at 40° up and down from the horizontal, with the top lines meeting below centre and the bottom lines intercepting the top lines. All lines have squared ends.

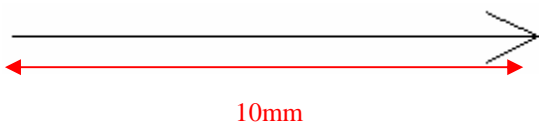
### Section IH – Tides, Currents

Int1 IH 40 – Flood tide stream with rate



Line weight for symbol is 0.1mm. Shaft of arrow is 10mm in length. Arrowhead consists of 2 lines, length 1.1mm and angled at 30° up and down from the horizontal. Tail of arrow consists of 5 lines, length 0.5mm, angled at 45° down from the horizontal, with a horizontal separation of 0.4mm. All lines have squared ends.

Int1 IH 41 – Ebb tide stream



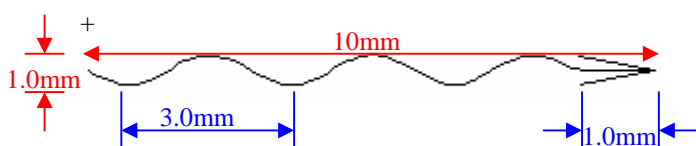
Line weight for symbol is 0.1mm. Shaft of arrow is 10mm in length. Arrowhead consists of 2 lines, length 1.1mm and angled at 30° up and down from the horizontal. All lines have squared ends.

Int1 IH 42 – Current in restricted waters



Line weight for symbol is 0.1mm. Shaft of arrow is 10mm in length. Arrowhead consists of 2 lines, length 1.1mm and angled at 30° up and down from the horizontal. Tail of arrow consists of 10 lines, length 0.5mm, angled at 45° up and down from the horizontal, with a horizontal separation of 0.4mm. All lines have squared ends.

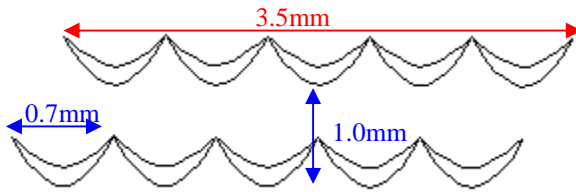
Int1 IH 43 – Ocean current with rates and seasons



Line weight for symbol is 0.1mm. Shaft of arrow consists of 3 waves with wavelength of 3mm and height of 1mm. Arrowhead consists of 2 lines, length 1.1mm and angled at 30° up and down from the horizontal. All lines have squared ends.

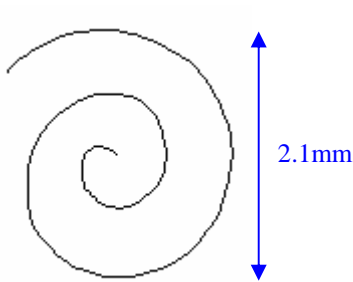


Int1 IH 44 – Overfalls, tide rips, races



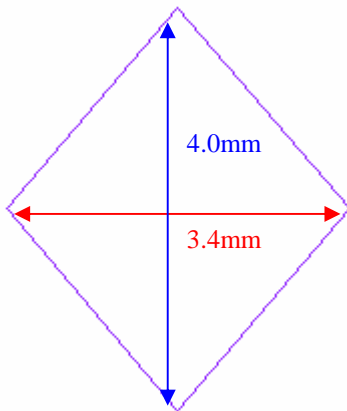
Symbol consists of 2 rows of 5 semi circles. Each semi circle's lineweight varies from 0.15mm at the bottom to 0.075mm at the side. Semi circles are 0.7mm long and the row is 3.5mm in length. Bottom row starts 1mm below and 0.35mm to the left of the top row.

Int1 IH 45 – Eddies



Spiral has a lineweight of 0.1mm. The height of the spiral is 2.1mm. The line has square ends.

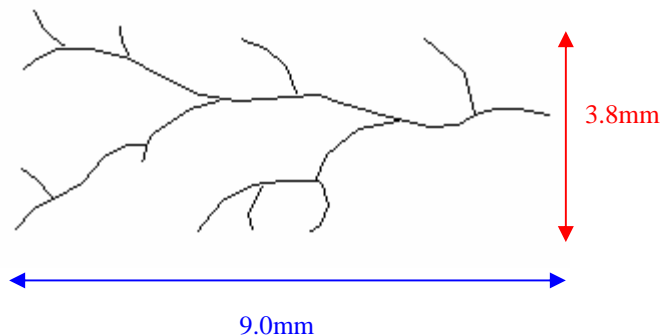
Int1 IH 46 – Position of tabulated tidal stream data with designation



Symbol is magenta in colour. Rhombus is 4.0mm in height and 3.4mm in width. Lineweight is 0.5mm.

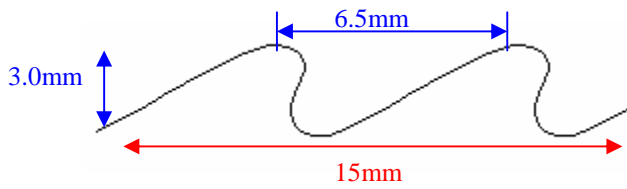
**Section IJ – Nature of the Seabed**

Int1 IJ 13 – Kelp, weed



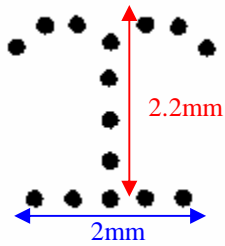
Symbol has a lineweight of 0.15mm. Symbol is 9mm in length and 3.8mm in height. All lines have rounded ends.

Int1 IJ 14 – Sandwaves



Symbol has a lineweight of 0.125mm with 3 apexes. Length of each wave is 6.5mm with an overall length of 15mm. Height of symbol is 3mm. Line has rounded ends.

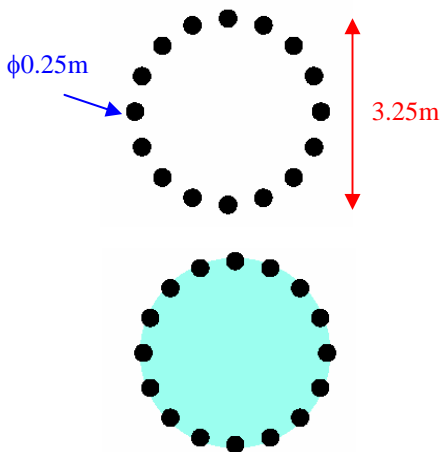
Int1 IJ 15 – Spring in seabed



Symbol consists of a series of solid filled dots. Dots have a diameter of 0.2mm and are spaced 0.45mm apart. Length of baseline is 2mm from the centre of the dots. Height of symbol is 2.2mm from the centre of the dots.

**Section IK – Rocks, Wrecks, Obstructions**

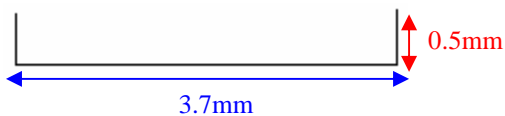
Int1 IK 1 – Danger line, in general



The circumference of the circle is formed with solid fill circles 0.65mm apart centre to centre. Diameter of each solid fill circle is 0.25mm. Diameter of circle is 3.25mm from the centre of the dots.

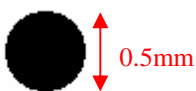
Specifications as above. Symbol has solid cyan fill.

Int1 IK 2 – Swept by wire drag or diver



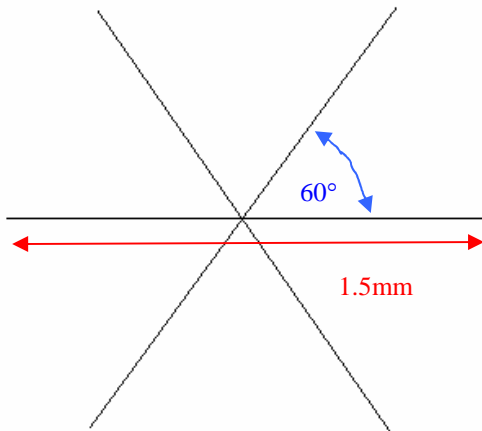
Symbol lineweight is 0.125mm. Length of baseline is 3.7mm and lengths of tips are 0.5mm angled perpendicular to the baseline. All lines have squared ends.

Int1 IK 10 – Rock (islet) which does not cover

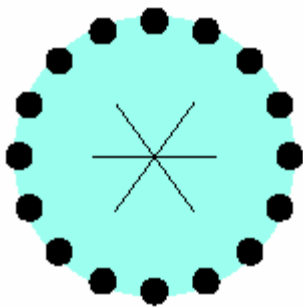


Symbol is a solid fill black circle with diameter of 0.5mm.

Int1 IK 11 – Rock which covers and uncovers

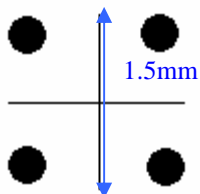


All lines in symbol have a lineweight of 0.15mm. All lines are 1.5mm in length. The 2 non-horizontal lines are angled at 60° up and down to the horizontal. All lines have squared ends.

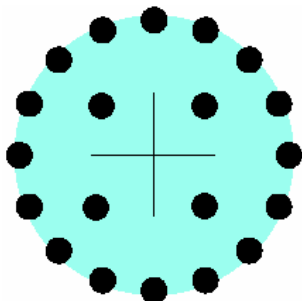


Symbol consists of IK11 – Rock, which covers and uncovers combined with symbol IK1 – Danger line in general filled with solid cyan.

Int1 IK 12 – Rock awash at the level of chart datum

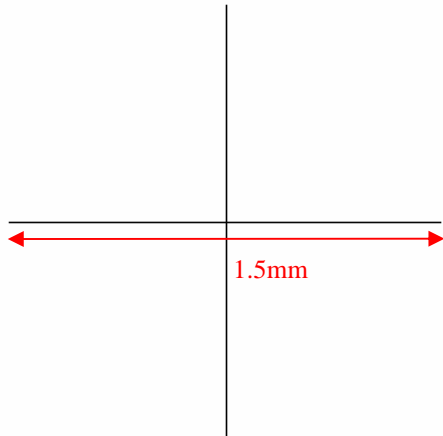


Lineweight of the cross is 0.15mm. Each line is 1.5mm in length. Circles are solid filled with a diameter of 0.25mm. Circles are positioned so that the outer edges of the circle line up with the tips of the cross lines. All lines have squared ends.

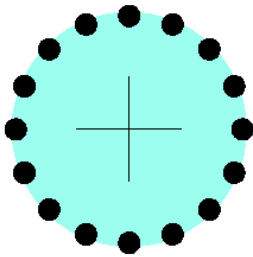


Symbol consists of IK12 – Rock awash at level of chart datum. Combined with symbol IK1 – Danger line in general filled with solid cyan.

Int1 IK 13 - Dangerous underwater rock of uncertain depth

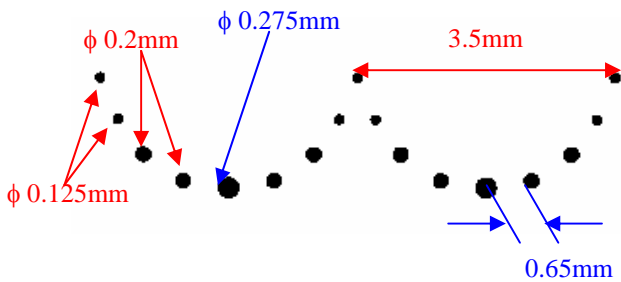


Lineweight of the cross is 0.15mm. Each line is 1.5mm in length. All lines have squared ends.



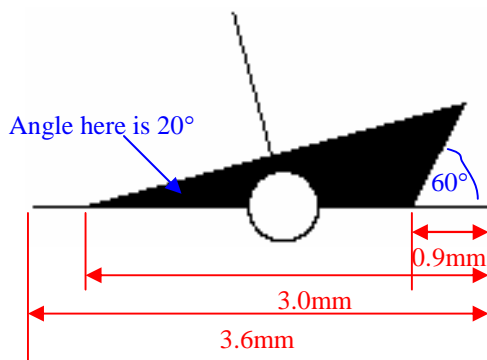
Symbol consists of IK13 – Dangerous underwater rock of uncertain depth. Combined with symbol IK1 – Danger line in general filled with solid cyan.

Int1 IK 17 – Breakers



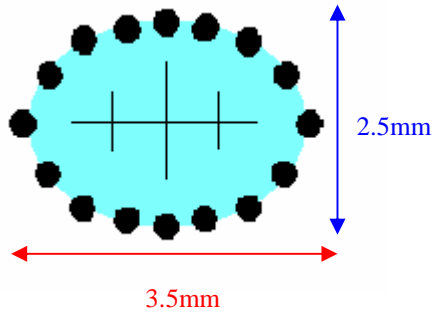
Symbol consists of a series of 9 dot semi circles arranged around a 3.5mm diameter circle. Spacing between each dot is 0.65mm. Diameter of bottom dot is 0.275mm. The two dots on each side have a diameter of 0.2mm and the next two have a diameter of 0.125mm

Int1 IK 24 – Wreck showing any portion of hull or superstructure at level of chart datum



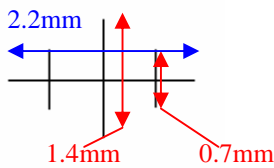
Symbol baseline has a lineweight of 0.15mm and length of 3.6mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.15mm. Mast has a lineweight of 0.15mm and a length of 1.7mm from the top of the circle angled at 70° from the horizontal. Solid triangle starts 0.9mm from the right and ends 3mm from the right. Front line is angled at 60° and rear line is angled at 20°. All lines have square ends.

Int1 IK 25 – Wreck showing mast or masts above chart datum only



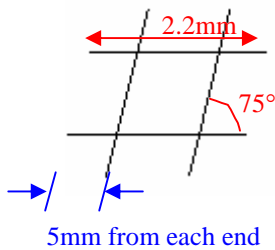
Symbol consists of IK29 - Non-dangerous wreck, least depth unknown, but thought to be more than 20 metres. Combined with an obstruction line in the shape of an oval filled with solid cyan. Dimensions of oval are 3.5mm long and 2.45mm high, measured from the outside edge of the obstruction line circles. See IK 1 for obstruction line specification.

Int1 IK 29 – Non-dangerous wreck, least depth unknown, but thought to be more than 20 metres



Symbol has a line weight of 0.15mm. Length of horizontal line is 2.2mm. Length of centre vertical line is 1.4mm. Length of two outside vertical lines is 0.9mm, and they are spaced 0.7mm from the centre. All lines have square ends.

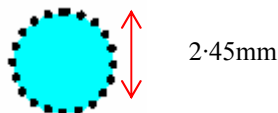
Int1 IK 31 – Remains of a wreck or other foul area, non-dangerous to navigation but to be avoided by vessels anchoring, trawling etc. (also IL22 – site of cleared platform)



Line weight for symbol is 0.1mm. Length of each line is 2.2mm. Top horizontal line is offset to the right by 3mm. Vertical lines intersect horizontal lines 5mm from each end and are drawn at an angle of 75° to the horizontal. All lines have square ends.

Int 1 IK40 – Obstruction, depth unknown.

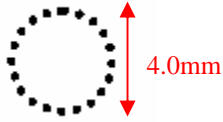
See IK1 for obstruction circle specifications. The circle has a diameter of 0.25mm.



Int1 IK41 – Obstruction, least depth known (Note – Due to differing sounding options and scales of charts, it is necessary to define 3 different sized obstruction circles with option of blue fill.)

See IK1 for obstruction circle specifications.

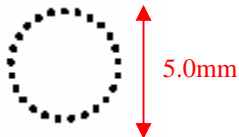
a)



Symbol is an obstruction circle of diameter 4mm to fit single and double-digit whole soundings as well as decimeter soundings to 9.9metres. The same symbol is also given with solid cyan fill for certain depth ranges.



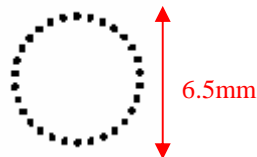
b)



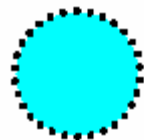
Symbol is an obstruction circle of diameter 5mm to fit double and triple-digit whole soundings as well as decimeter soundings to 30.9metres. The same symbol is also given with solid cyan fill for certain depth ranges.



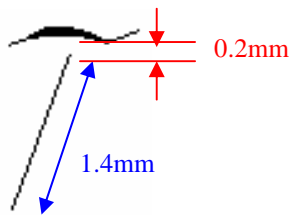
c)



Symbol is an obstruction circle of diameter 6.5mm to fit quadruple digit whole soundings. The same symbol is also given with solid cyan fill for certain depth ranges.

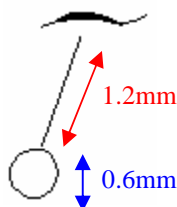


Int1 IK 43.1 – Stumps of posts or piles, wholly submerged



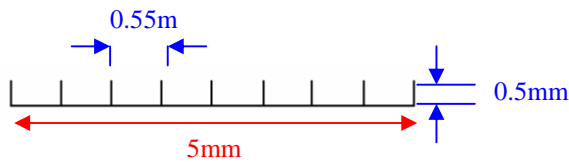
Vertical line lineweight is 0.2mm. Length is 1.4mm angled at 70° to the horizontal. Line is offset 0.2mm from the top wave. Top wave is 1.5mm long and varies in width from 0.1mm at edge to 0.3mm in the centre. All lines have square ends.

Int1 IK 43.2 – Submerged pile, stake, snag, well or stump (with exact position)



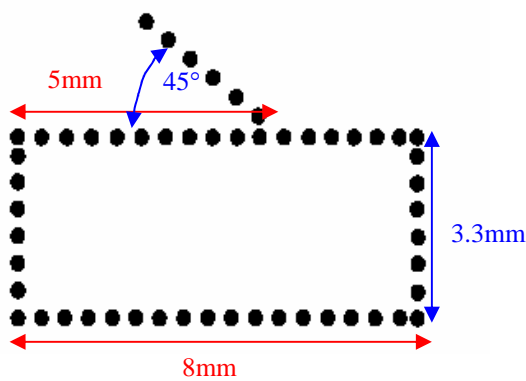
Symbol is as IK43.1 with a circle added at the base of the vertical line. Vertical line is shorter at 1.2mm. Circle is 0.6mm in diameter with a lineweight of 0.15mm. All lines have square ends.

Int1 IK 44.1 – Fishing stakes



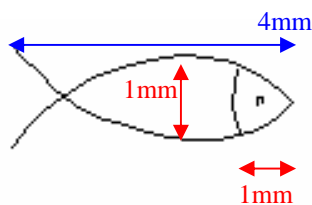
Lineweight of symbol is 0.15mm for the base line and 0.1mm for the ticks. Symbol is 5mm long with 0.5mm vertical lines spaced at 0.55mm intervals.

Int1 IK 44.2 – Fish trap, fish weirs, tunny nets



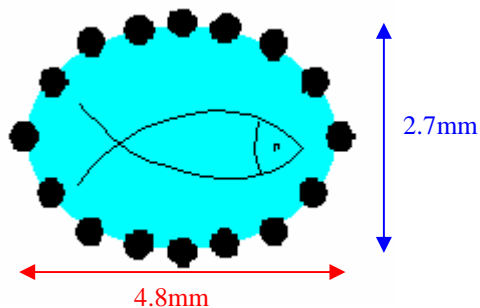
Symbol consists of a number of small solid filled circles arranged in a rectangle with an offshoot on the top. Solid filled circles have a diameter of 0.25mm. Width of rectangle is 8mm, height of the rectangle is 3.3mm, from the outside of the circles. Top line is 4mm long at an angle of 45° to the horizontal. Line starts 5mm from left edge of rectangle

Int1 IK 46.1 – Fish haven



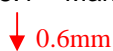
Symbol has a lineweight of 0.15mm. Length of symbol is 4mm. Symbol is 1mm high. 1mm from the front there is a semicircle to distinguish the head. The eye is drawn in the centre 0.5mm from the front and is a solid fill circle of diameter 0.3mm. All lines have square ends

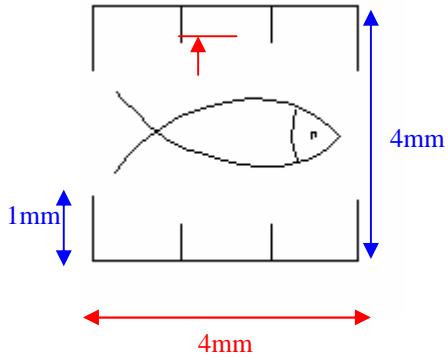
Int1 IK 46.2 – Fish haven



Symbol consists of IK46.1 – Fish haven. Combined with a obstruction line in the shape of an oval filled with solid cyan. Dimensions of oval are 4.8mm long and 2.7mm high, measured from the outside edge of the dangerline circles. See IK1 for obstruction line specifications.

Int1 IK 48.1 – Marine farm (on large-scale charts)

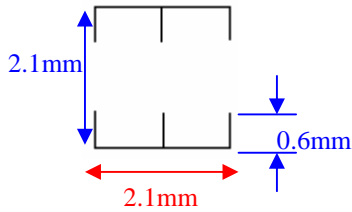




Symbol consists of Int1 IK 46.1 – Fish haven. Combined with a symbol of lineweight 0.15mm. Symbol is 4mm wide and end lines are 1mm in height. 2 middle lines are 0.6mm in height. Top line and bottom line are separated by 4mm. All lines have square ends.



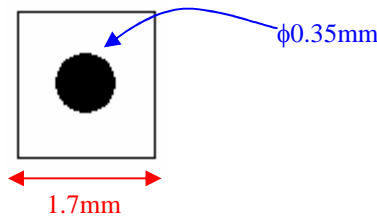
Int1 IK 48.1 – Marine farm (on large-scale charts)



Symbol has a lineweight of 0.15mm. Symbol is 2.1mm in width. Vertical lines are all 0.6mm in length. Top line and bottom lines are separated 2.1mm. All lines have square ends.

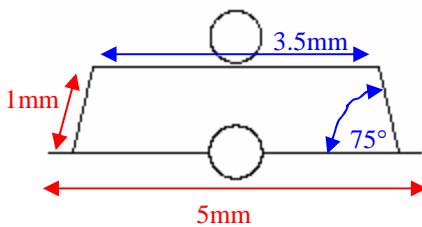
### Section IL – Offshore Installations

Int1 IL 10 – Production platform, Platform, Oil derrick (also IL11 – Flare stack (at sea), IL 12 – Single Point Mooring, SALM, ALC)



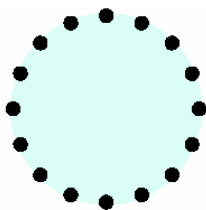
Symbol consists of solid fill circle surrounded by a square. Solid fill circle has a diameter of 0.35mm. Outer square is 1.7 x 1.7mm with a lineweight of 0.15mm

Int1 IL 16 – Oil or Gas installation buoy, CALM, SBM



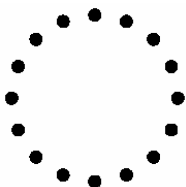
Symbol baseline has a lineweight of 0.15mm and length of 5mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Top circle has a diameter of 0.5mm with a lineweight of 0.1mm. End lines are 1mm in length and are angled at 75° to the horizontal, with a lineweight of 0.2mm. Top line is 3.5mm with a lineweight of 0.2mm. All lines have square ends.

Int1 IL21.1 – Suspended well, depth over wellhead unknown



This symbol is a cyan filled obstruction circle. Refer to Int1-IK41 for specifications on differing sizes.

Int1 IL21.2 – Suspended well, with depth over wellhead

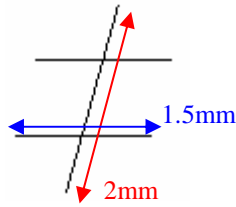


This symbol is an obstruction circle. Refer to Int1-IK41 for specifications on differing sizes.

INT1 IL22 – Site of Cleared Platform. The symbol is foul area (see IK 31) for specification).

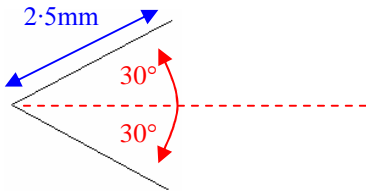
### Section IM – Tracks, Routes

Int1 IM 1 – Leads in line



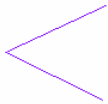
Symbol line weight is 0.2mm. Vertical line is 2mm in length and angled at 15° to the right of the vertical. 2 cross lines are 1.5mm in length and spaced 0.7mm apart.

Int1 IM 4 – Recommended tracks not based on a system of fixed marks



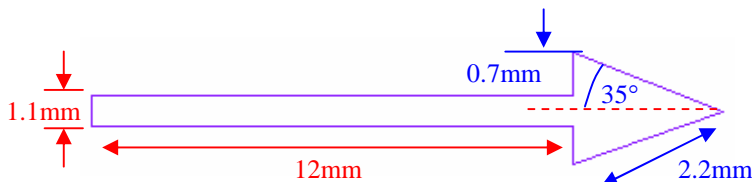
Symbol consists of two lines, with line weight of 0.2mm and length 2.5mm, angled at 30° up and down from the horizontal. All lines have square ends.

Int1 IM 5 – One-way track and two-way track



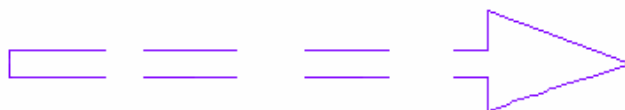
Symbol colour is magenta. See Int1 IM4 for specification.

Int1 IM 10 – Established (mandatory) direction of traffic flow



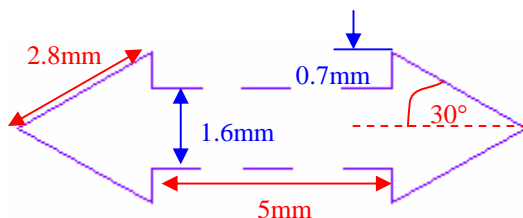
Symbol colour is magenta. Line weight is 0.15mm. Shaft of arrow is 12mm in length and the shaft sides are 1.1mm apart. Arrow head sides are 0.7mm and the tip is 2 lines of 2.2mm angled at 35° up and down from the horizontal. All lines have square ends.

Int1 IM 11 – Recommended direction of traffic flow



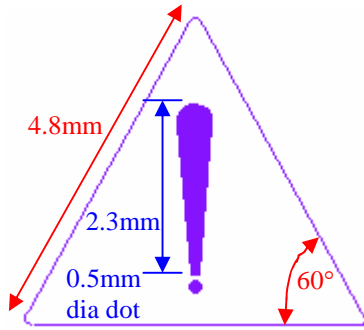
Symbol is same colour, line weight and dimensions as IM10, however the line that makes up the shaft sides is dashed. Dashing must be even on both sides with a dash length of 2.2mm and gap length of 0.8mm. Arrowhead is not dashed. All lines have square ends.

Int1 IM 11 – Two way route arrow (double ended)



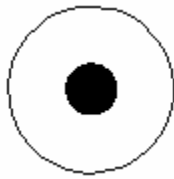
Symbol colour is magenta. Line weight is 0.15mm. Distance between arrow shaft sides is 1.6mm and they are 5mm long. Arrowhead sides are 0.7mm and the arrow tips are two lines of 2.8mm in length angled at 30° from the horizontal. Shaft of arrow is a dashed line. All lines have square ends.

Int1 IM 16 – Precautionary area



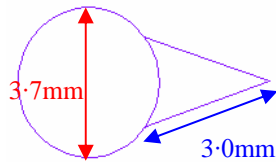
Symbol colour is magenta and consists of an equilateral triangle with an exclamation mark in the centre. Lineweight of triangle is 0.4mm. Length of sides is 4.8mm with rounded ends and angles of 60° between each side. Dot at bottom of exclamation mark is 0.5mm in diameter with a clearance of 0.2mm. Top of exclamation mark is 2.3mm in length and varies in width from 0.25mm at the bottom to 0.6mm at the top and is rounded at both ends.

Int1 IM 30 – Radar surveillance station

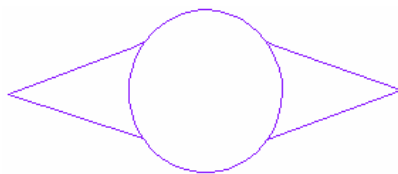


See Int1 IB22-Fixed Point

Int1 IM 40 – Radio pointing (calling in or way) points showing direction(s) of vessel movement with designation (if any) and VHF-channel

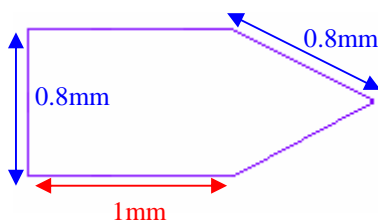


Symbol colour is magenta with a lineweight of 0.3mm for the circle. Diameter of circle is 3.7mm. Arrow lineweight is 0.25mm and consists of 2 lines 3.0mm long at an angle of 20° up and down from the horizontal. All lines have square ends.



Symbol is as above except has an extra arrow on the opposite side of the circle indicating a two-way reporting system.

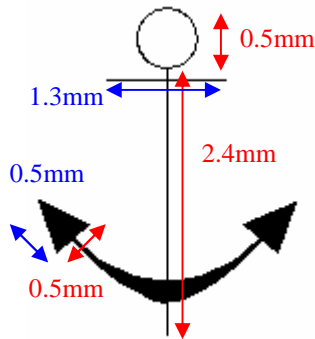
Int1 IM 50 – Ferry



Symbol colour is magenta with a lineweight of 0.1mm. Symbol is 0.8mm high and sides of boat are 1mm in length. Front of boat is 0.8mm long at 30° above and below the horizontal. All lines have square ends.

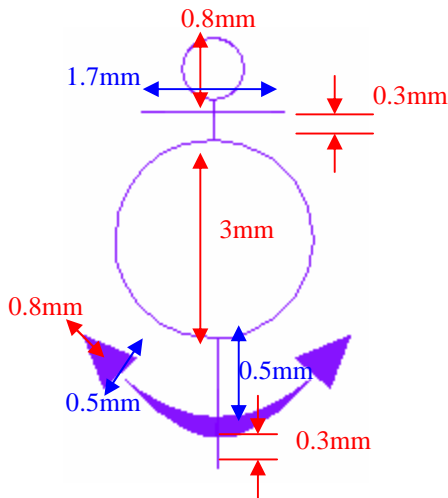
**Section IN – Areas, Limits**

Int1 IN 10 – Recommended anchorage (no defined limits)

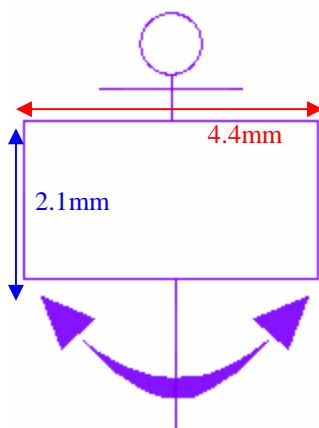


Symbol lineweight is 0.1mm. Centre shaft is 2.4mm long and the cross line at the top is 1.3mm long. Cross line is offset 0.1mm down from the top circle. Top circle diameter is 0.5mm. Bottom arc is 2mm in length along a circle of diameter 2.5mm and varies in lineweight between 0.3mm in the centre and 0.15mm on the outside. Bottom section of the bottom arc sits 0.3mm from the bottom of the shaft. Triangles are isosceles with a baseline of 0.5mm and height of 0.5mm, filled with solid black. All lines have square ends.

Int1 IN 11 – Anchor berths

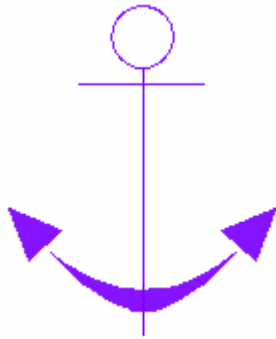


Symbol colour is magenta. Symbol lineweight is 0.125mm. Cross line at the top is 1.7mm long. Top circle diameter is 0.8mm and sits flush with the cross line. Cross line is offset 0.1mm down from the top circle. Centre shaft is 0.3mm long at the top, followed by a 3mm diameter circle, then 0.5mm long, followed by the bottom arc, then 0.3mm at the bottom. Bottom arc is 4mm in length along a circle of diameter 6mm and varies in lineweight between 0.3mm in the centre and 0.15mm on the outside. Triangles are isosceles with a baseline of 0.5mm and height of 0.8mm, filled with solid magenta. All lines have square ends.



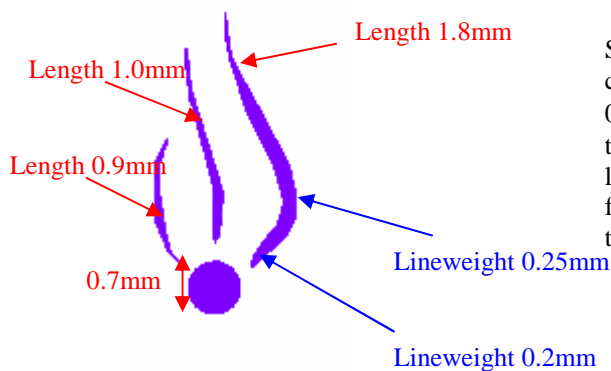
Symbol colour is magenta. Symbol lineweight is 0.125mm. Cross line at the top is 1.7mm long. Cross line is offset 0.1mm down from the top circle. Top circle diameter is 0.8mm and sits flush with the cross line. Centre shaft is 0.3mm long at the top, followed by a rectangle 4.4mm wide and 2.1mm high, then 1mm long, followed by the bottom arc, then 0.3mm at the bottom. Bottom arc is 4mm in length along a circle of diameter 6mm and varies in lineweight between 0.3mm in the centre and 0.15mm on the outside. Triangles are isosceles with a baseline of 0.5mm and height of 0.8mm, filled with solid magenta. All lines have square ends.

Int1 IN 12 – Anchorage area in general



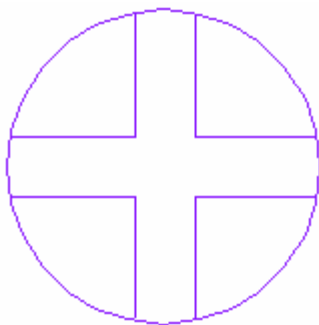
Symbol colour is magenta. Refer Int1 IN10 - Recommended anchorage (no defined limits) for specifications

Int1 IN 12.7 – Explosives anchorage area



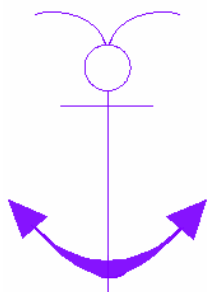
Symbol colour is magenta and consists of a magenta solid filled circle of diameter 0.7mm with 3 flares on top. Flares are offset by 0.1mm from the circle at start 45° left and right of the circle and the 3<sup>rd</sup> one starts at 90°. Flares range in length from 0.9mm on the left, to 1.0mm in the centre, to 1.8mm on the right. Lineweight of flares ranges from 0.2mm at the ends to 0.25mm at the centre of the curves.

Int1 IN 12.8 – Quarantine anchorage area



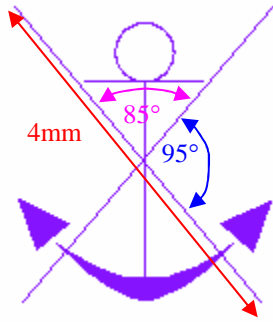
Symbol colour is magenta. Refer Int1 IF 62 – Health Office, Hospital for symbol specifications.

Int1 IN 14 – Anchorage for sea-planes



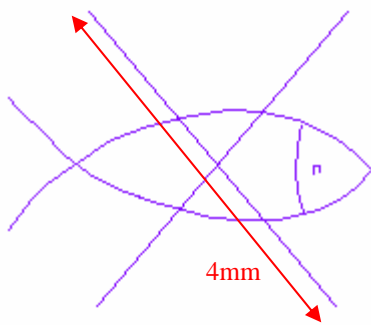
Symbol colour is magenta. Refer Int1 IN10 - Recommended anchorage (no defined limits) for specifications of anchor. Wings on top are 1.5mm in length and have a lineweight of 0.2mm at the centre changing to 0.1mm at the tips. All lines have square ends.

Int1 IN 20 – Anchoring prohibited



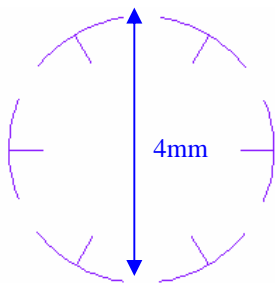
Symbol colour is magenta. Refer Int1 IN10 - Recommended anchorage (no defined limits) for specifications of anchor. Cross lines are 4mm in length with a line weight of 0.1mm. Lines cross at 95° and 85°. All lines have square ends.

Int1 IN 21 – Fishing prohibited



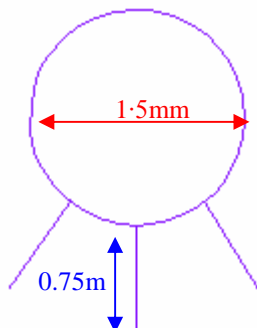
Symbol colour is magenta. Refer Int1 IK 46.1 – Fish haven for specifications of fish. Cross lines are 4mm in length with a line weight of 0.1mm. Lines cross at 95° and 85°. All lines have square ends.

Int1 IN 26 – Historic wreck and restricted area



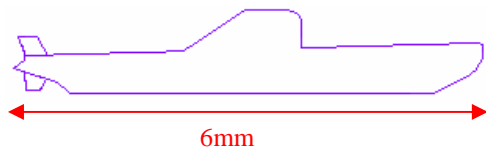
Symbol colour is magenta with a line weight of 0.15mm. Symbol is the restricted area line with a diameter of 4mm. Refer to line specifications for specifications of restricted area line. All lines have square ends.

Int1 IN 32 – Mine-laying practice area



Symbol colour is magenta and consists of a circle with 3 stems downward. Line weight is 0.15mm. Diameter of circle is 1.5mm. Stems are 0.75mm in length. Centre stem is straight down and side stems are angled 30° from the centre of the circle. All lines have square ends

Int1 IN 33 – Submarine transit lane and exercise area

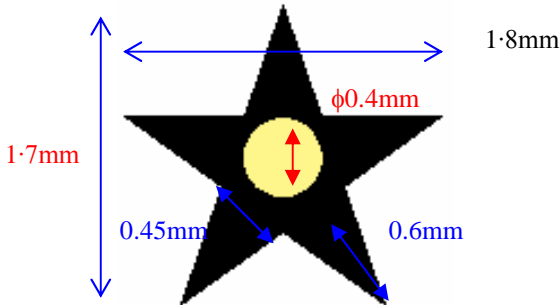


Symbol colour is magenta. Lineweight is 0.2mm. Length of submarine is 6mm. Width of submarine is 0.6mm at the front and 0.5mm at the back with a flat bottom. Conning tower is 0.4mm high and 0.8mm long with a 45° down line at the back. All lines have square ends.

**Section IP - Lights**

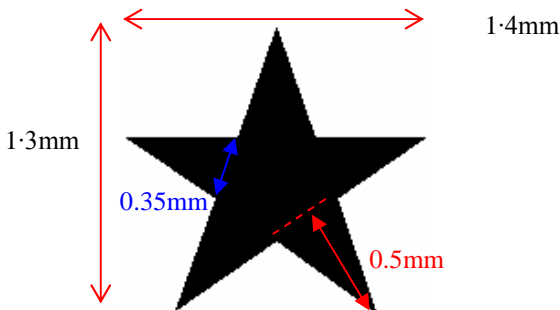
Int1 IP 1 – (a) Major Light, (b) Minor Light

(a) Major Light



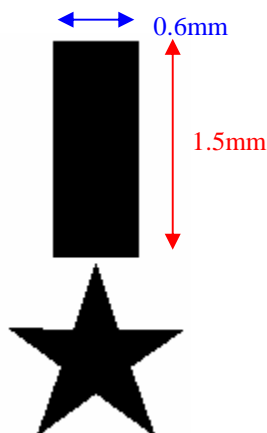
Symbol consists of 5 solid filled isosceles triangles with a solid buff circle in the centre. Triangles are 0.6mm high and 0.45mm wide. Circle is 0.4mm in diameter. Width of the symbol is 1.8mm and height is 1.7mm.

(b) Minor Light



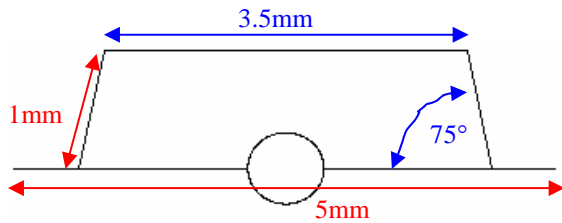
Symbol consists of 5 solid filled isosceles triangles. Triangles are 0.5mm high and 0.35mm wide. Width of the symbol is 1.4mm and the height is 1.3mm.

Int1 IP 4 – Lighted beacon



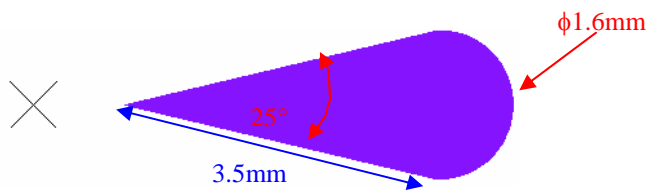
Symbol consists of Int1 IP 1 – (b) minor light. With a solid black rectangle placed on top. Rectangle is 1.5mm high by 0.6mm wide. Rectangle is offset from the star by 0.05mm.

Int1 IP 6 – Major floating light (Light vessel, major light-float, LANBY)



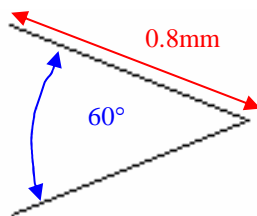
Symbol baseline has a line weight of 0.15mm and length of 5mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. End lines are 1mm in length and are angled at 75° to the horizontal, with a line weight of 0.2mm. Top line is 3.5mm with a line weight of 0.2mm. All lines have square ends.

Int1 IP 11 – Colour of Lights



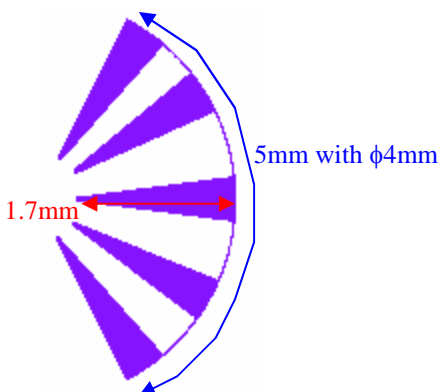
Symbol is solid filled chart magenta. Cone has an angle of 25° at the apex with straight edges 3.5mm long. The circumference of a circle with diameter 1.6mm then connects the straight edges. Overall length of symbol is 4.3mm. Insertion point is marked with the cross.

Int1 IP 40 – Sector Light arrows



Symbol has a line weight of 0.1mm. Arrow head consists of 2 lines, 0.7mm in length that meet at an angle of 60°. All lines have square ends.

Int1 IP 63 – Floodlit, floodlighting of a structure



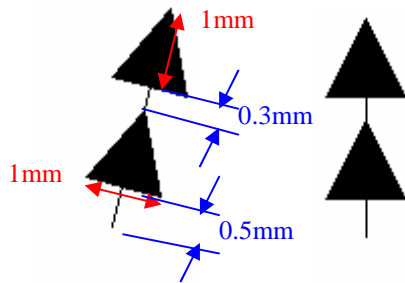
Symbol colour is magenta. Symbol consists of 5mm of arc drawn around the circumference of a circle with a diameter of 4mm. Line weight is 0.125mm. There are 5 solid filled magenta isosceles triangles inside the arc. One is horizontal and the others are angled at 30° and 60° above and below the horizon. Triangles are 0.4mm wide at the base and 1.7mm high with a rounded apex.



**Section IQ – Buoys, Beacons**

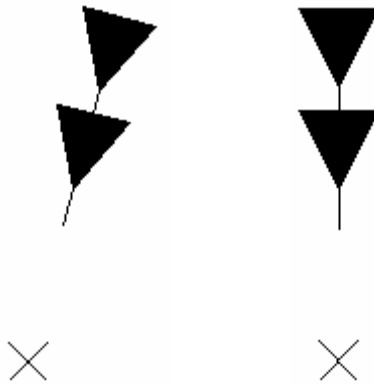
Int1 IQ 9 – Buoy and Beacon tilted and upright topmarks

(a)



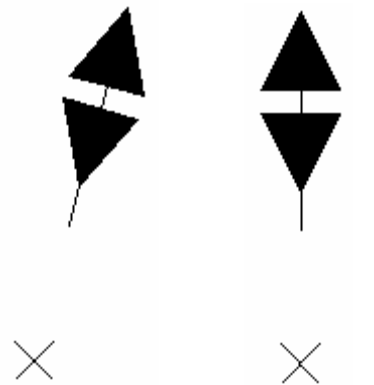
Symbol consists of two upright, solid black filled isosceles triangles. Triangles are 1mm wide on the base and 1mm high. Centrelines have a lineweight of 1mm. Top line has a length of 0.3mm and the bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.

(b)



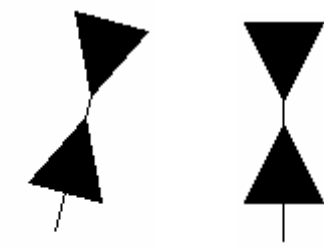
Symbol consists of two upside-down, solid black filled isosceles triangles. Triangles are 1mm wide on the base and 1mm high. Centrelines have a lineweight of 1mm. Top line has a length of 0.3mm and the bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.

(c)



Symbol consists of one upright and one upside-down, solid black filled isosceles triangles. Triangle bases face each other at the centre. Triangles are 1mm wide on the base and 1mm high. Centrelines have a lineweight of 1mm. Top line has a length of 0.3mm and the bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.

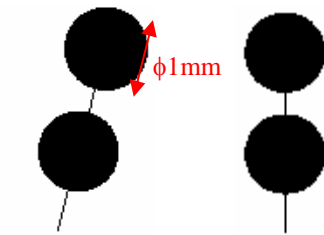
(d)



Symbol consists of one upright and one-upside down, solid black filled isosceles triangles. Triangle apexes face each other at the centre. Triangles are 1mm wide on the base and 1mm high. Centrelines have a lineweight of 1mm. Top line has a length of 0.3mm and the bottom line has a length of 0.5mm Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



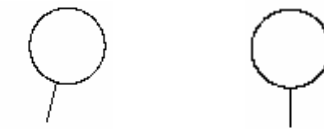
(e)



Symbol consists of 2 solid black filled circles. Circles have a diameter of 1mm. Centrelines have a lineweight of 1mm. Top line has a length of 0.3mm and the bottom line has a length of 0.5mm Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



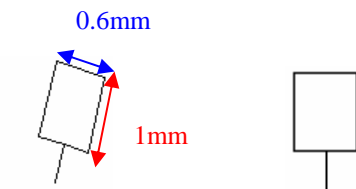
(f)



Symbol consists of one hollow circle. Circle has a lineweight of 0.1mm and a diameter of 1mm. Centreline has a lineweight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



(g)



Symbol consists of one hollow rectangle. Rectangle has a lineweight of 0.1mm and is 1mm in height and 0.6mm in width. Centreline has a lineweight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



(h)



Symbol consists of one solid filled, black rectangle. Rectangle is 1mm in height and 0.6mm in width. Centreline has a lineweight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



(i)



Symbol consists of one solid filled, upright, black isosceles triangle. Triangle is 1mm in height and 1mm in width. Centreline has a lineweight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



(j)



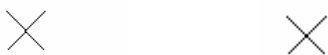
Symbol consists of one hollow, upright, isosceles triangle. Triangle has a lineweight of 0.1mm and is 1mm in height and 1mm in width. Centreline has a lineweight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



(k)



Symbol consists of one 90° cross. Cross has a lineweight of 0.1mm and both lines are 1.2mm in length. Centreline has a lineweight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



(l)



Symbol consists of one solid filled, black circle. Circle has a diameter of 1mm. Centreline has a lineweight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



(m)



Symbol consists of one hollow, upside-down, isosceles triangle. Triangle has a line weight of 0.1mm and is 1mm in height and 1mm in width. Centreline has a line weight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



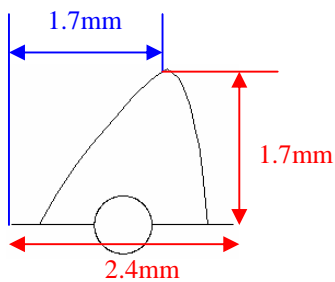
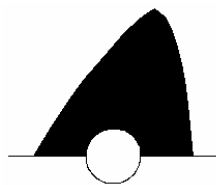
(n)



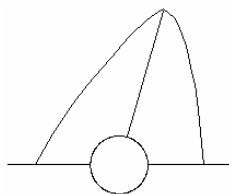
Symbol consists of one hollow, upright, isosceles triangle. Triangle has a line weight of 0.1mm and is 1mm in height and 1mm in width. Centreline has a line weight of 1mm. Bottom line has a length of 0.5mm. Symbol is available angled at 15° to the right of the vertical, and upright. All lines have square ends.



Int1 IQ 20 – Conical buoy, nun buoy

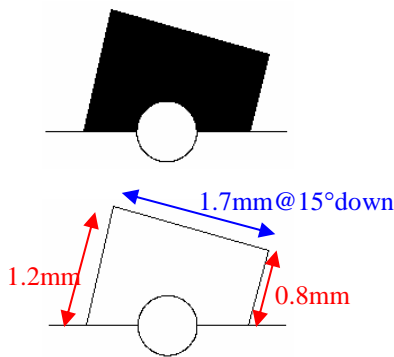


Symbol baseline has a line weight of 0.1mm and length of 2.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Conical shape has a line weight of 0.2mm and consists of 2 curves, starting 0.3mm in from each end of the baseline. The curves meet at a point 1.7mm above the baseline and 1.7mm from the left end of the baseline. Buoy can either be solid black or hollow. All lines have square ends.

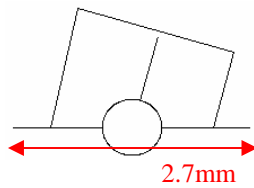


This option is for conical buoys in multiple colours. The centre stripe has a line weight of 0.1mm and angled at 15° right of vertical. The stripe originates from the centre of the base circle but is only symbolised from the edge of the circle to the top of the buoy.

Int1 IQ 21 – Can or cylindrical buoy

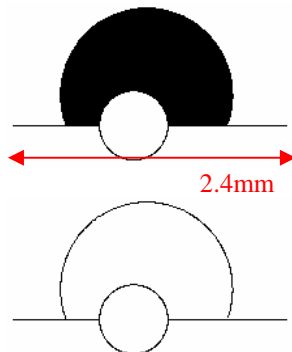


Symbol baseline has a line weight of 0.1mm and length of 2.6mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Square shape has a line weight of 0.2mm. The square is 1.2mm long on the left and 0.8mm on the right and 1.7mm long on the top. Square starts 0.4mm in from each end of the baseline. Square should be angled at 15° right of the vertical. Buoy can either be solid black or hollow. All lines have square ends.

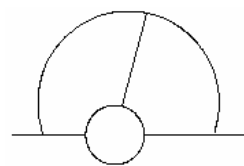


This option is for can buoys in multiple colours. The centre stripe has a line weight of 0.1mm and angled at 15° right of vertical. The stripe originates from the centre of the base circle but is only symbolised from the edge of the circle to the top of the square.

Int1 IQ 22 – Spherical buoy

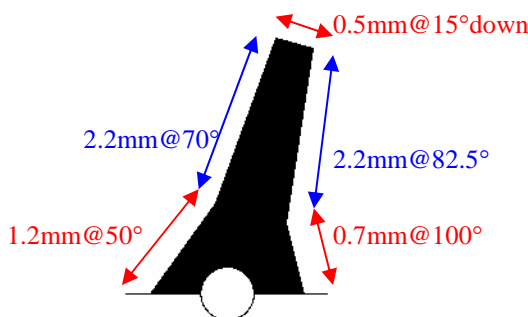


Symbol baseline has a line weight of 0.1mm and length of 2.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Circle shape has a line weight of 0.2mm. The circle has a diameter of 1.8mm and goes up to 1.4mm above the baseline. Circle starts 0.5mm in from the left end of the baseline and 0.5mm from the right end of the baseline. Buoy can either be solid black or hollow. All lines have square ends.

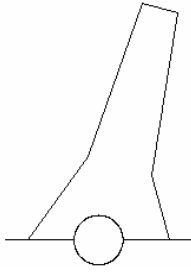


This option is for spherical buoys in multiple colours. The centre stripe has a line weight of 0.1mm and angled at 15° right of vertical. The stripe originates from the centre of the base circle but is only symbolised from the edge of the circle to the top of the outer circle.

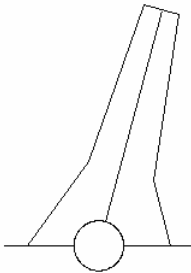
Int1 IQ 23 – Pillar Buoy



Symbol baseline has a line weight of 0.1mm and length of 2.5mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Pillar is described as follows. 0.3mm in from the left end, then 1.2mm up at 50°, then 2.2mm up at 70°, then 0.5mm at 15° below the horizontal, then 2.2mm down at 82.5°, then 0.7mm down at 100°. Symbol should meet baseline 0.3mm from the right end. All angles are measured with zero being to the right. Buoy can either be solid black or hollow. All lines have square ends.

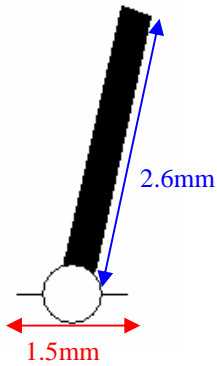


Symbol is described as above. The line weight of the structure is 0.125mm. All lines have square ends.



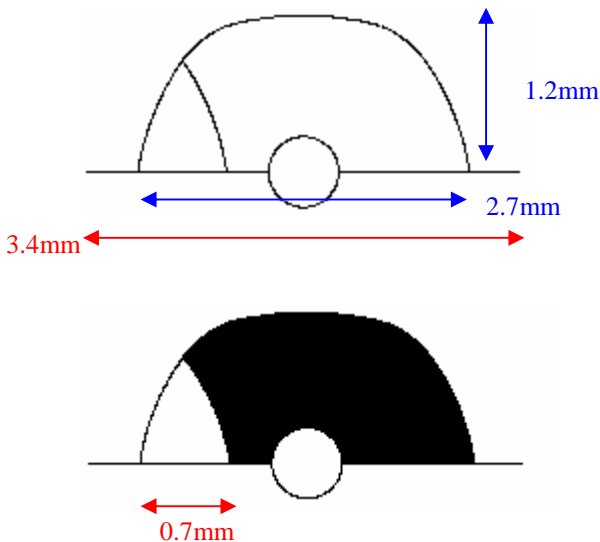
This option is for pillar buoys in multiple colours. The centre stripe has a line weight of 0.1mm and angled at 15° right of vertical. The stripe originates from the centre of the base circle but is only symbolised from the edge of the circle to the top of the symbol.

Int1 IQ 24 – Spar buoy, spindle buoy



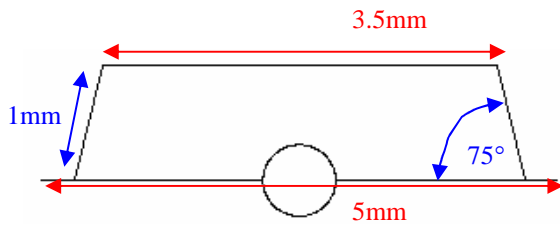
Symbol baseline has a line weight of 0.1mm and length of 1.5mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Spar is 2.6mm long from the bottom circle and 0.4mm wide. Spar is angled at 15° to the right of vertical, originating from the centre of the base circle but symbolised only from the edge of the circle. All lines have square ends.

Int1 IQ 25 – Barrel buoy



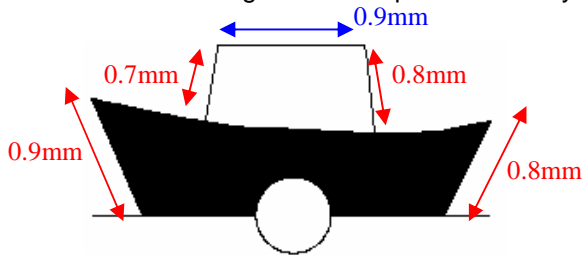
Symbol baseline has a line weight of 0.1mm and length of 3.4mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Barrel section is a half oval, which measures 2.7mm across and 1.2mm high. Oval starts and finishes 0.4mm in from both ends. Left end section line starts 0.7mm in from the start of the barrel and is a mirrored reversal of the barrel line. Buoy can have larger section solid black or hollow. All lines have square ends.

Int1 IQ 26 – Super buoy



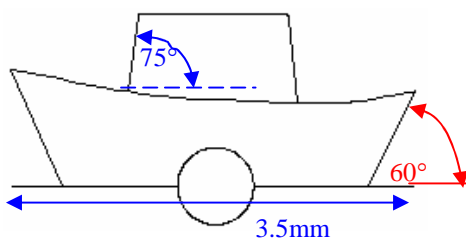
Symbol baseline has a line weight of 0.15mm and length of 5mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. End lines are 1mm in length and are angled at 75° to the horizontal, with a line weight of 0.2mm. Top line is 3.5mm with a line weight of 0.2mm. All lines have square ends.

Int1 IQ 30 –Light –float as part of IALA System

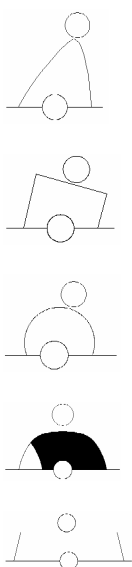


Symbol baseline has a line weight of 0.15mm and length of 3.5mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.15mm. Left and right hulls are angled out at 60° from the horizontal and starts 0.5mm in from each end. Left hull is 0.9mm long and right hull is 0.8mm long. A shallow arc joins both hulls. Top structure sidelines are angled in at 75°. Left side is 0.7mm high and right side is 0.8mm high. Top line is 0.9mm long and is parallel to the horizontal. For a light structure part of the IALA system, the hull is filled black. All lines have square ends.

Int1 IQ 31 – Light –float not part of IALA System



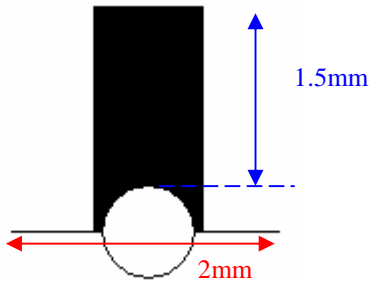
Int1 IQ 40 – Mooring buoys



All of the previously described buoys can also be shown as mooring buoys. In order to display a mooring buoy, a mooring ring must be added. The mooring ring has a line weight of 0.1mm and a circle diameter of 0.5mm. The ring is either directly on top of the buoy, or placed 15° to the right of centre depending on the structure of the buoy.

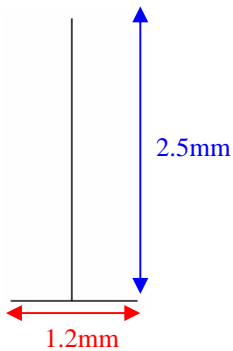
Int1 IQ 58 – Ocean Data Acquisition System. This symbol is identical to IP 6 and IQ 26.

Int1 IQ 80 – Beacon in general

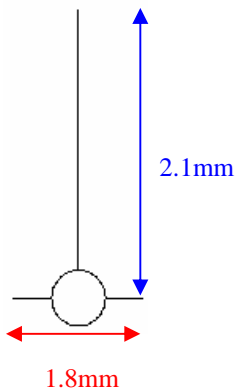


Symbol baseline has a lineweight of 0.1mm and length of 1.9mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Beacon is 1.5mm high from the top of the circle and 0.7mm across, filled black. All lines have square ends.

Int1 IQ 90 – Stake, pole



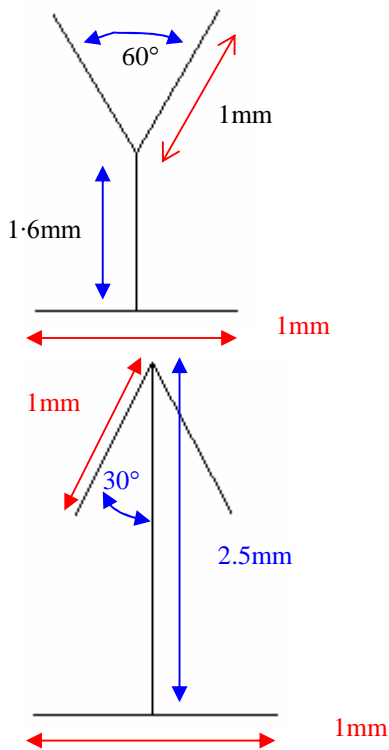
Symbol baseline has a lineweight of 0.1mm and length of 1.2mm. Vertical line has a lineweight of 0.15mm and a length of 2.5mm. All lines have square ends.



Symbol baseline has a lineweight of 0.1mm and length of 1.8mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Vertical line has a lineweight of 0.2mm and is 2.1mm in length from the baseline. All lines have square ends.



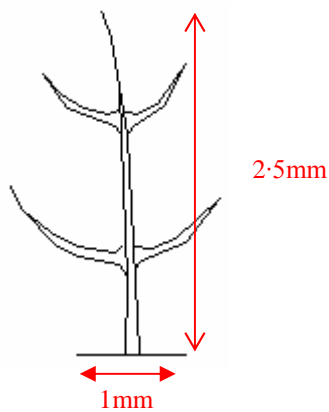
Int1 IQ 91 – Perch, stake



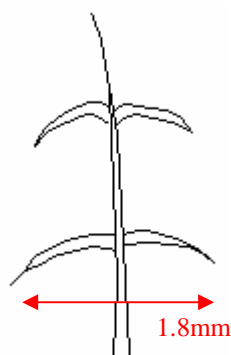
Symbol baseline has a lineweight of 0.1mm and length of 1mm. Vertical line has a lineweight of 0.2mm and a length of 1.6mm. Inverted arrowhead consists of 2 lines angled up at 30° left and right of the vertical, with a length of 1mm. All lines have square ends.

Symbol baseline has a lineweight of 0.1mm and length of 1mm. Vertical line and arrowhead has a lineweight of 0.15mm and a length of 2.5mm. Arrowhead consists of 2 lines angled down at 30° left and right of the vertical, with a length of 1mm. All lines have square ends.

Int1 IQ 92 – Withy

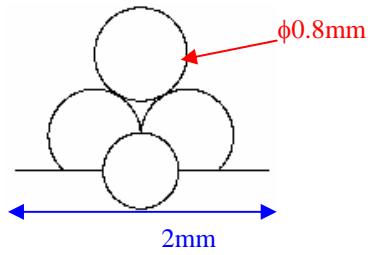


Symbol baseline has a lineweight of 0.1mm and length of 1mm. Trunk of withy is curved left and starts with a lineweight of 0.2mm and finishes with a lineweight of 0.05mm. Branches are spaced at 1/3 trunk intervals and curve down. Lineweight starts at 0.2mm and finishes with 0.05mm. Height of withy is 2.5mm from the baseline. Withy is 1.8mm wide across the bottom set of branches. All lines have square ends.



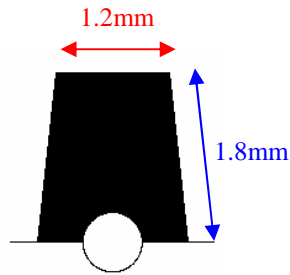
Symbol baseline has a lineweight of 0.1mm and length of 1mm. Trunk of withy is curved left and starts with a lineweight of 0.2mm and finishes with a lineweight of 0.05mm. Branches are spaced at 1/3 trunk intervals and curve down. Lineweight starts at 0.2mm and finishes with 0.05mm. Height of withy is 2.5mm from the baseline. Withy is 1.8mm wide across the bottom set of branches. All lines have square ends.

Int1 IQ 100 – Cairn

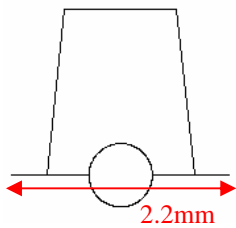


Symbol baseline has a line weight of 0.1mm and length of 2mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Cairn consists of 3 circles arranged with 2 on the bottom and one on the top. Circles have a diameter of 0.8mm and a line weight of 0.15mm. All lines have square ends.

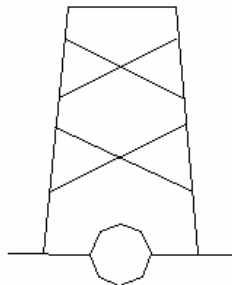
Int1 IQ 110 – Beacon towers



Symbol baseline has a lineweight of 0.1mm and length of 2.2mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Tower is 1.8mm in height, from the baseline, with a lineweight of 0.2mm. Width of tower is 1.6mm at the bottom and 1.2mm at the top. Buoy can either be solid black or hollow. All lines have square ends.

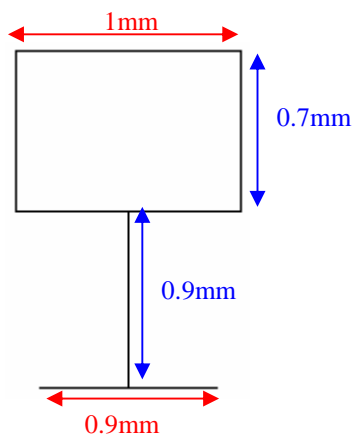


Int1 IQ 111 – Lattice beacon



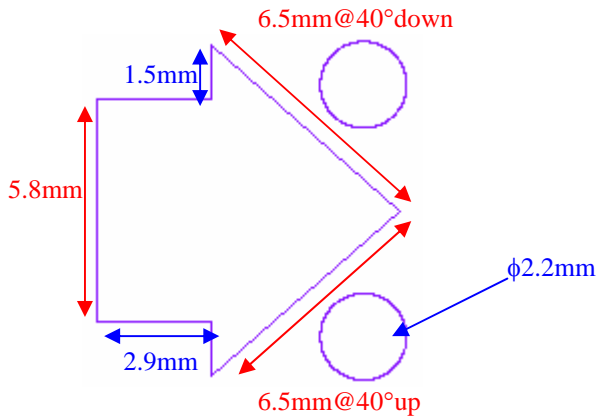
Symbol baseline has a lineweight of 0.1mm and a length of 2.2mm. Position circle has a diameter of 0.5mm and a lineweight of 0.1mm. Tower is 1.2mm wide at the top. It is 2.3mm high and measures 1mm across the top. Lineweight of structure is 0.2mm. Hatching consists of two crossed lines at 1/3 tower height. Lineweight of hatching is 0.1mm. All lines have square ends.

Int1 IQ 126 – Notice board



Symbol lineweight is 0.125mm. Baseline is 0.9mm long. Vertical line is 0.9mm high. Rectangle is 1mm wide and 0.7mm high. All lines have square ends.

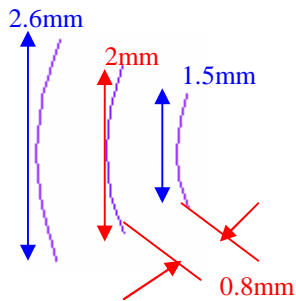
Int1 IQ 130.2 – Direction of Buoyage



Symbol colour is magenta with a lineweight of 0.15mm. Base of arrow is 5.8mm high and length of shaft is 2.9mm. Arrowhead goes out 1.5mm, then the tip is 6.5mm long at an angle of 40° up and down from the horizontal. Circles have a diameter of 2.2mm. All lines have square ends.

**Section IR – Fog Signals**

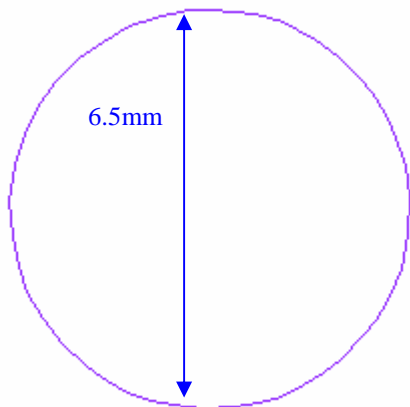
Int1 IR 1 – Position of fog signal



Symbol colour is magenta. Lineweight of symbol is 0.3mm. Symbol consists of 3 sections of arc with smaller section on the right and gradually getting bigger towards the right. Inner section is 1.5mm long, middle section is 2mm long and the outer section is 2.6mm long. Lines are spaced 0.8mm apart. All lines have square ends.

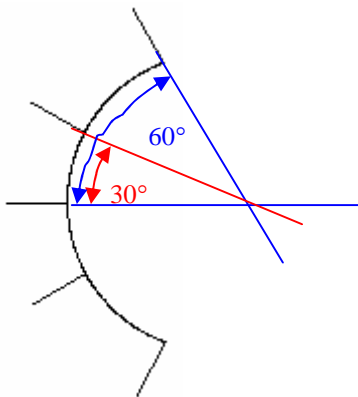
**Section IS – Radar, Radio, Electronic Position- Fixing Systems**

Int1 IS 1 – Radar range



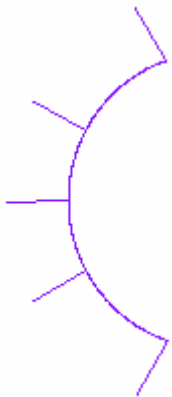
Magenta circle has a lineweight of 0.25mm, and a diameter of 6.5mm.

Int1 IS 4 – Radar reflector



Symbol consists of a semi circle with 5 lines extending from it. Symbol has a line weight of 0.15mm. Semi circle is based on a circle of diameter 2.5mm. Circle is only drawn to 60° above and below the horizon. Lines are 0.6mm in length. The middle line is horizontal and the other 4 lines are drawn at 30° and 60° above and below the horizon. All lines have square ends

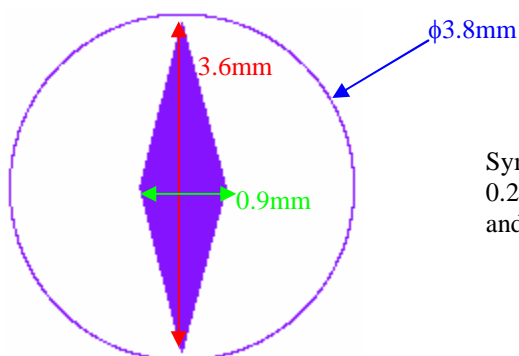
Int1 IS 5 – Radar-conspicuous feature



Symbol description is the same as IS4 – Radar Reflector. Symbol colour is chart magenta.

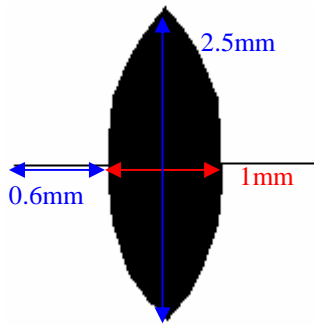
**Section IT - Services**

Int1 IT 1 – Boarding place, position of a Pilot-Cruising Vessel, Pilots transferred by helicopter



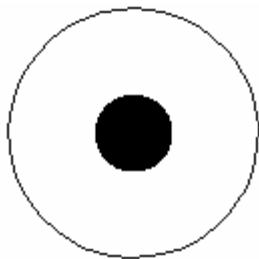
Symbol colour is magenta. Outer circle has a line weight of 0.2mm and a diameter of 3.8mm. Diamond is 3.6mm in height and 0.9mm in width, filled magenta.

Int1 IT 12 – Rescue Station, Lifeboat station, Rocketstation



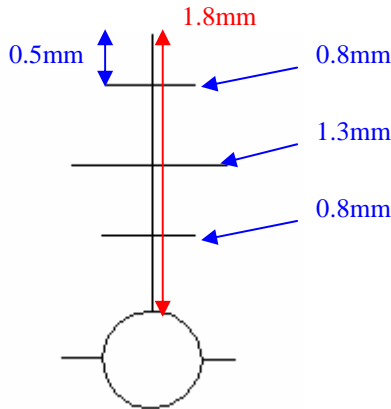
Symbol is a black outline of a small boat. Hull is 2.5mm long and 1mm wide. Lines on each side extend out horizontally with a length of 0.6mm. Lines have a lineweight of 0.15mm

Int1 IT 20 – Signal Station



Refer INT1 IE1 – Example of Landmark for specification of this symbol.

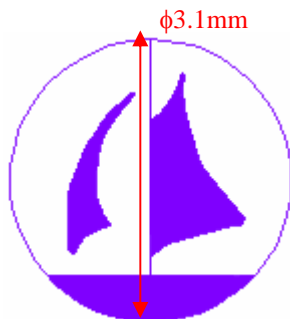
Int1 IT 32 – Tide scale or gauge



Symbol baseline has a lineweight of 0.1mm and length of 1.3mm. Bottom circle has a diameter of 0.5mm with a lineweight of 0.1mm. Centreline and the 3 horizontal lines have a lineweight of 0.2mm. Centre line has a length of 1.8mm from the top of the base circle. The 2 short horizontal lines are 0.8mm in length and the long one is 1.3mm in length. Horizontal lines are spaced 0.5mm apart, starting 0.5mm down from the top of the centre line. All lines have square ends.

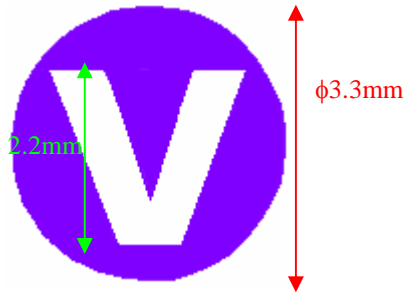
**Section IU – Small Craft Facilities**

Int1 IU 1 – Boat harbour, marina



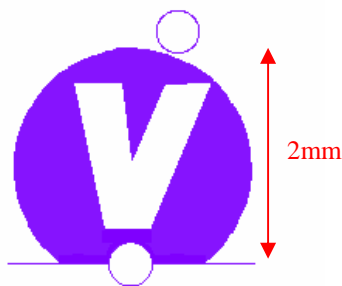
Symbol colour is magenta. Outer circle has a lineweight of 0.15mm with a diameter of 3.1mm. From the bottom of the circle to a point 0.5mm from the bottom is filled magenta. Vertical centreline has a lineweight of 0.15mm. The rest of the circle is taken up with the sails of the yacht filled magenta. Front and back sails are basically curved triangles. All lines have square ends.

Int1 IU 2 – Yacht berths without facilities



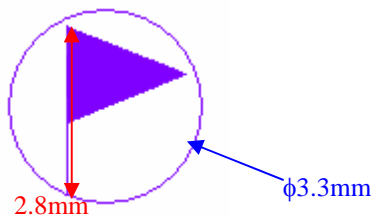
Symbol colour is magenta. Circle has a diameter of 3.3mm. Circle is solid fill magenta with a hollow upper case V in the centre. V symbol is 2.2mm in height.

Int1 IU 3 – Visitor's mooring



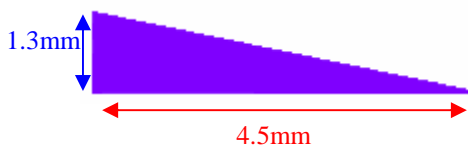
Symbol colour is magenta. Symbol baseline has a line weight of 0.1mm and length of 2.7mm. Bottom circle has a diameter of 0.5mm with a line weight of 0.1mm. Circle of buoy is filled magenta with a diameter of 2.5mm, but is only drawn up to 2mm above the baseline. Inside the circle is a hollow, uppercase, italicised V, the V is 1.2mm high. The ring has a line weight of 0.1mm and a diameter of 0.5mm. The ring is placed 15° to the right of centre. All lines have square ends.

Int1 IU 4 – Yacht club, Sailing club



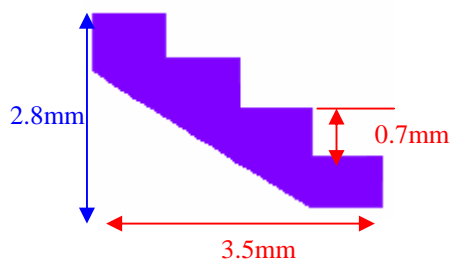
Symbol colour is magenta. Outer circle has a line weight of 0.15mm with a diameter of 3.3mm. Flagstaff is 2.8mm from the circumference with a line weight of 0.15mm. Flagstaff should not touch any other part of the circle except for at the base of the staff. Triangle is isosceles, with a vertical base of 1.7mm and a horizontal height of 1.8mm and filled magenta. All lines have square ends.

Int1 IU 5 – Slipway



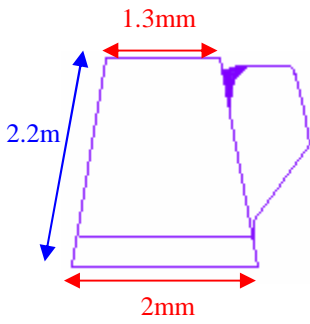
Symbol colour is magenta. Slipway is 4.5mm along the base and 1.3mm high on the left end. Symbol is filled magenta.

Int1 IU 7 – Public landing, Steps, Ladder



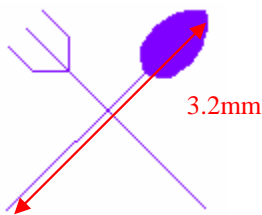
Symbol colour is magenta and consists of 4 evenly spaced steps. Each step is 0.7mm thick. Symbol height is 2.8mm and symbol length is 3.5mm. Symbol is filled magenta.

Int1 IU 10 – Public Inn



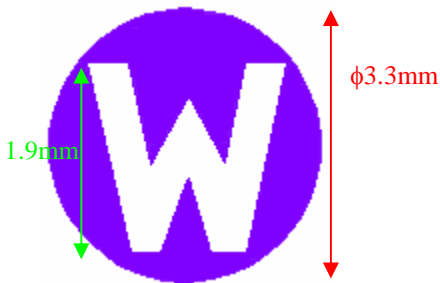
Symbol colour is magenta. Bottom line is 2mm in length. Side lines are 2.2mm in length angled at 80° left and right of the vertical. Top line is 1.3mm in length. Handle is as shown in the diagram with a solid section at the top to signify a thick join. All of these lines are 0.15mm in thickness. The second bottom line on the inside of jug is 0.1mm in thickness and offset 0.5mm up from, and parallel to, the bottom line. All lines have square ends.

Int1 IU 11 – Restaurant



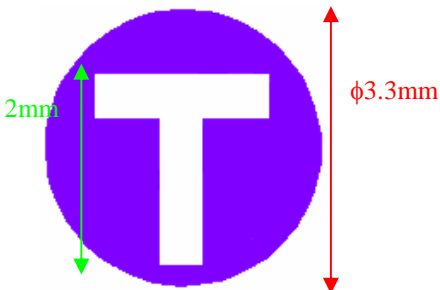
Symbol colour is magenta. Symbol consists of a fork angled at 45° left crossing a spoon angled at 45° right. Both fork and spoon are 3.2mm in length. Lineweight of both handles is 0.15mm. Lineweight of fork prongs is 0.1mm. All lines have square ends.

Int1 IU 17 – Water Tap



Symbol colour is magenta. Circle has a diameter of 3.3mm. Circle is solid fill with a hollow upper case W in the centre. W is 1.9mm high. Symbol is filled solid magenta.

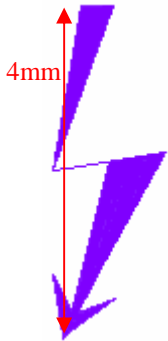
Int1 IU 18 –Fuel station (Petrol, Diesel)



Symbol colour is magenta. Circle has a diameter of 3.3mm. Circle is solid fill with a hollow upper case T in the centre. T is 2mm high. Symbol is filled solid magenta.

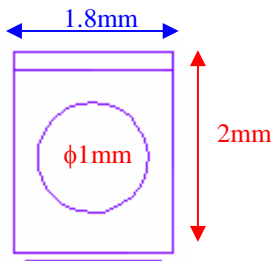


Int1 IU 19 – Electricity



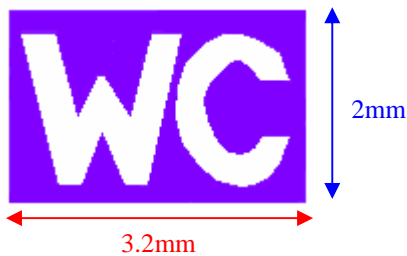
Symbol colour is magenta. Symbol is an electricity flash. The 2 arrow sections and arrowhead are solid filled. The joining line at centre has a line weight of 0.1mm. Length of each flash is 2mm and width varies from 0.1mm at the bottom to 0.6mm at the top. Length of symbol from the tip of the arrowhead to the top is 4mm

Int1 IU 22 – Laundrette



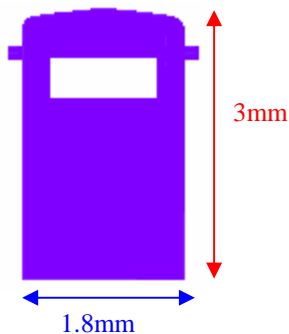
Symbol colour is magenta. Symbol is 2mm high and 1.8mm wide. Circle has a diameter of 1mm. Bottom line is offset down by 0.15mm. All these lines have a line weight of 0.15mm. Inside top parallel line is offset down by 0.3mm. All lines have square ends.

Int1 IU 23 – Public Toilets



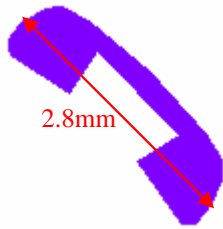
Symbol colour is magenta. Rectangle is 3.2mm wide and 2mm high. Rectangle is filled magenta with hollow upper case letters WC in the centre. Letters WC are 1.1mm high.

Int1 IU 24 –Post box



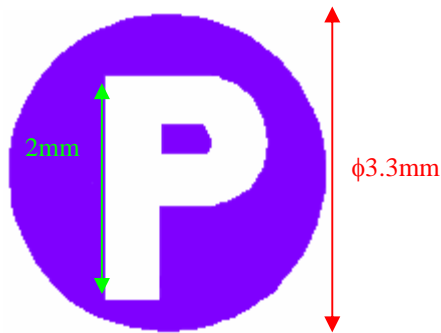
Symbol colour is magenta. Post box is 3mm high and 1.8mm wide filled solid magenta. Hollow rectangle is 1mm wide and 0.3mm high, and the top of the rectangle starts 0.8mm down from the top of the post box. Notches on either side are 0.3mm long and 0.2mm wide. Bottom of the notches lines up with top of the hollow rectangle.

Int1 IU 25 –Public telephone



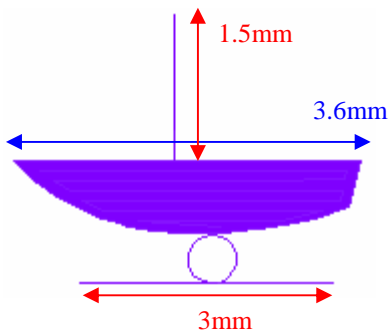
Symbol colour is magenta and is a solid magenta telephone handset. Handset is 2.8mm long and is angled at 45° to the horizontal.

Int1 IU 27 –Car park



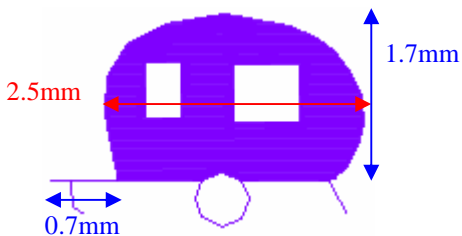
Symbol colour is magenta. Circle has a diameter of 3.3mm. Circle is solid fill with a hollow upper case P in the centre.

Int1 IU 28 –Parking for boats and trailers



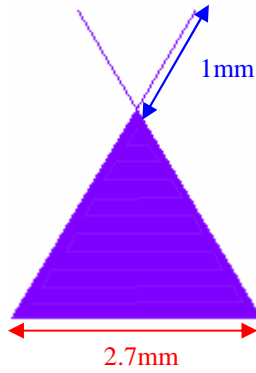
Symbol colour is magenta. Baseline is 3mm in length with a line weight of 0.1mm. The wheel is positioned 1.7mm from the left end of the baseline. Wheel is 0.5mm in diameter with a line weight of 0.1mm. Yacht is 3.6mm in length and the mast 1.5mm high with a line weight of 0.15mm. All lines have square ends.

Int1 IU 29 – Caravan Site



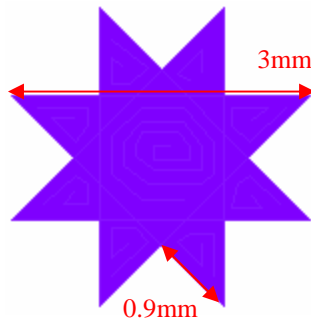
Symbol colour is magenta. Caravan body is 2.5mm long and 1.7mm high. All linework has a line weight of 0.1mm. Wheel has a diameter of 0.5mm. Front line on trailer extends forward by 0.7mm.

Int1 IU 30 –Camping Site



Symbol colour is magenta. Solid magenta triangle is an equilateral triangle with side length 2.7mm. Top lines are 1mm in length angled at 60° left and right of the horizontal, with a lineweight of 0.15mm. All lines have square ends.

Int1 IU 31 – Water Police



Symbol colour is magenta. Star has 8 points. Star is 3mm high and 3mm wide. Side length of triangles is 0.9mm

### AHO Specific Features

AHO Crest

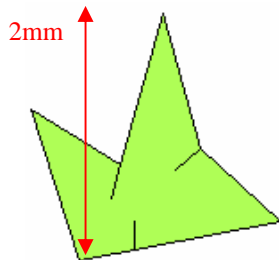
Symbol is the AHO Crest. Crest is 19mm high from the top of the sailing ship to the bottom of the tied bow.



### Section IJ – Nature of the Seabed

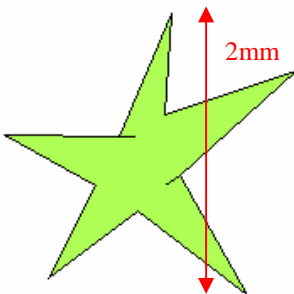
Int1 IJ 22 – Coral Reef, which covers and uncovers

Coral



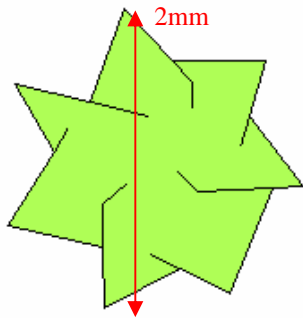
Symbol is used to depict a lone coral reef. Linework has a lineweight of 0.1mm. Symbol is filled green. Symbol measures 2mm at the widest point.

Coral Lone



Symbol is used to depict a lone coral reef. Linework has a lineweight of 0.1mm. Symbol is filled green. Symbol measures 2mm at the widest point.

Coral Lone 2



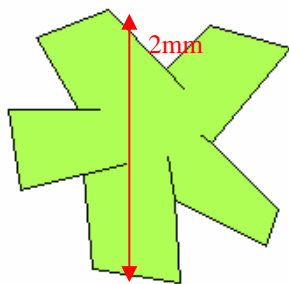
Symbol is used to depict a lone coral reef. Linework has a lineweight of 0.1mm. Symbol is filled green. Symbol measures 2mm at the widest point.

Coral Reef 1-5



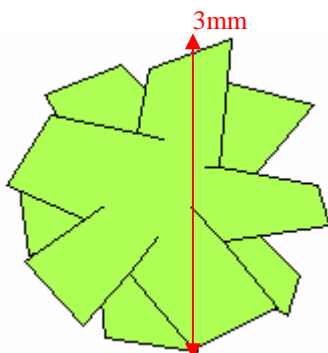
These 5 symbols are part of the matrix that makes up symbology for Int1 IJ22 – Coral Reef. They are to be used to fill gaps in symbology that occur when lines are split. Lineweight is 0.1mm. Default size is 1.5mm but 0.9mm and 3mm can also be used depending on scale of the chart. Sizes are measured at the widest point on the symbol. All lines have square ends.

Int1 IJ 22 – Rocky Area, which covers and uncovers  
Rock Lone1



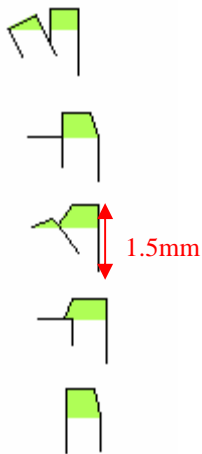
Symbol is used to depict a lone rock reef. Linework has a lineweight of 0.1mm. Symbol is filled green. Symbol measures 2mm at the widest point.

Rock lone3



Symbol is used to depict a lone coral reef. Linework has a lineweight of 0.1mm. Symbol is filled green. Symbol measures 3mm at the widest point.

Rock Reef 1-5

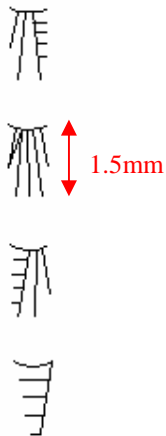


These 5 symbols are part of the matrix that makes up symbology for Int1 IJ21 – Rock Reef. They are to be used to fill gaps in symbology that occur when lines are split. Lineweight is 0.1mm. Default size is 1.5mm but 0.9mm and 3mm can also be used depending on scale of the chart. Sizes are measured at the widest point on the symbol. All lines have square ends.

**Section IC – Natural Features**

Int1 IC3 – Steep coast, Steep coast with rock cliffs, Cliffs

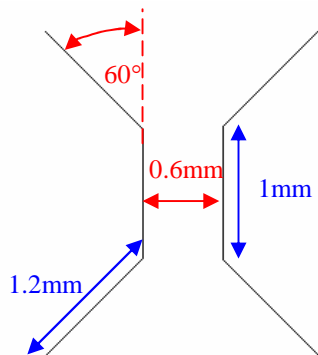
Cliff 1-5



These 4 symbols are part of the matrix that makes up symbology for Int1 IC3 – Steep Coast, Cliffs. They are to be used to fill gaps in symbology that occur when lines are split. Lineweight is 0.1mm. Default size is 1.5mm but 0.9mm and 3mm can also be used depending on scale of the chart. Sizes are measured at the widest point on the symbol. All lines have square ends.

**Section ID – Cultural Features**

Int1 ID 22- Fixed Bridge



Symbol is a black point feature for use when a double lined road crosses a line feature. Lineweight of symbol is 0.2mm and all lines have square ends. Buttresses are 1.2mm in length at an angle of 60° left and right of the vertical. Bridge length is 1mm and the width is 0.6mm