

Description:

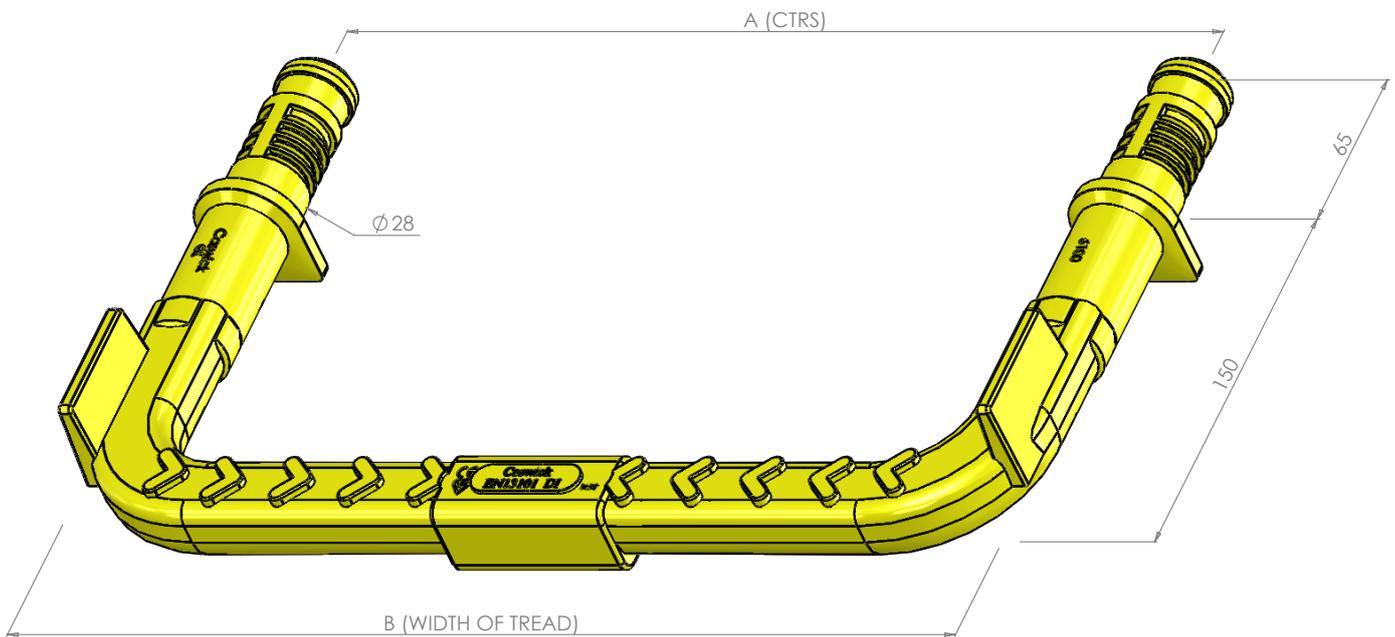
**A range of products designed for underground communications chambers. These are manufactured by Caswick in the UK and include chamber handling, cable routing and personnel access.**

**Steps**

Steps facilitate personnel access and egress from communication chambers by fixing them to the rigid wall of the chamber. The steps are fitted vertically aligned with a spacing of 300mm to form a run of steps of the desired height. They can be fitted by casting into concrete at the time of manufacture, fitting with epoxy to drilled holes in concrete or by using the Caswick insert system. Other fixing methods are available, contact Caswick for information.

Steps comply with the requirements outlined in Afnor document NF P98-050-1 when fitted in accordance with the requirements of this standard and are CE marked to EN13101 Steps for Manholes.

Code	A (tail centres)	B (tread length)
S3017Y	300 mm	308 mm
S3317Y	330 mm	338 mm

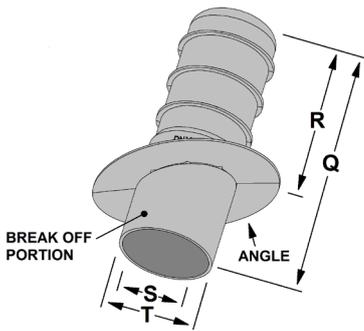


**Inserts**

Inserts are used to create accurately dimensioned holes in concrete. These are supported in the mould whilst the concrete is being poured. The concrete surrounds the insert and anchors it. Once the concrete has hardened the mould is removed which exposes the open end of the insert. This can then be used to fix a Caswick step by hammering them into a pair of horizontally aligned inserts at the appropriate centres or for other applications such as the handling of the unit during manufacture, transportation or installation. A wide range of inserts are available, contact Caswick for further information.

**Break off insert**

The break off insert is fitted by pushing the break off portion into a hole in the formwork or mould. The concrete is poured around the insert, once it has hardened the formwork is removed, the break off portion snaps off with the formwork leaving the insert finished flush with the concrete face.

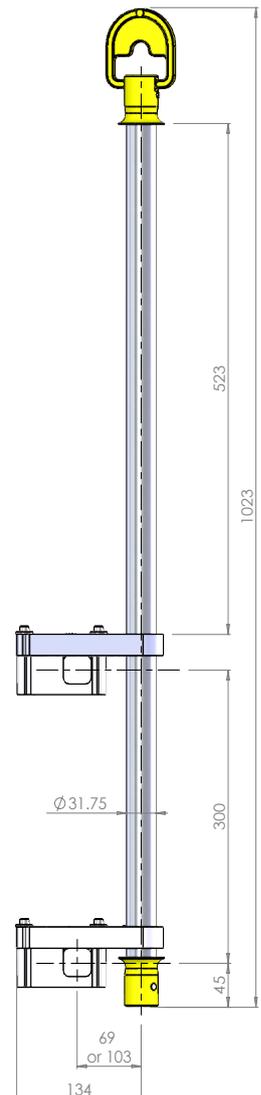


Code	Q (overall length)	R (body length)	S (internal diameter)	T (fixing hole diameter)	Angle
SP194	100 mm	70 mm	27 mm	35 mm	0°
SP195	100 mm	70 mm	27 mm	35 mm	18°

**Handhold - SH410**

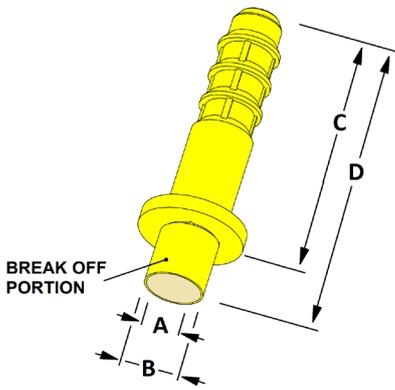
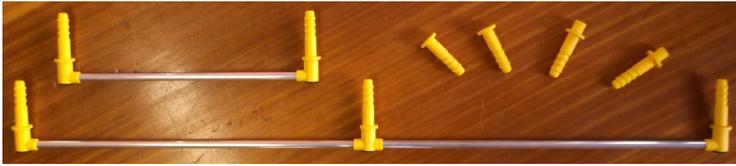
The handhold is designed to aid access to and egress from communication chambers. Once the surface access cover is removed, the handhold can be raised through the opening, locked in position and used to provide stability to the person as they transition from the surface level to the steps in the chamber. Once work is complete the handhold is lowered into the chamber beneath the level of the surface until it is required again. The handhold bolts directly onto Caswick steps and does not require tools to operate once it has been installed. The handhold remains fully within the chamber.

The handhold is available in alternative sizes and fixing methods, contact Caswick for further information.



**Description:**

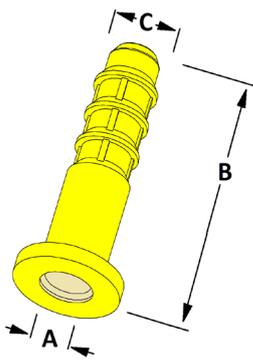
The cable hanger creates a bracket which cables can be looped around or hung over in a cast concrete cable box. This can be to tidy installed cables or keep cables out of harms way during termination. The plugs can be hammered into formed holes (drilled or similar) in the concrete or supported in the formwork during casting. The cable hanger plugs are manufactured from high impact grade virgin polypropylene. The bars are manufactured from aluminium tube. The plugs can also be supplied individually to allow your own reinforcement to be fitted, for example galvanised steel. The product options are detailed below;



**Plug 14mm flange flat break off**

The plug has a break off portion on the open end of the insert which is pushed into a 20mm diameter formed hole in the concrete formwork. This supports the plug whilst the concrete is poured. Once the concrete has hardened the formwork is removed, the break off portion snaps away with the formwork leaving the plug in the concrete. The internal diameter is sized to accept 14mm diameter components such as a formed metal bar or the Caswick hammer in cable support system.

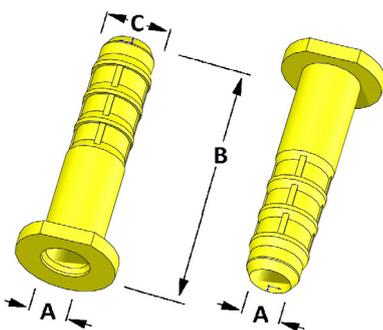
Code	A (internal diameter)	B (breakoff diameter)	C (plug cast-in length)	D (overall length)
SP197	14 mm	20 mm	84 mm	104 mm



**Plug 14mm**

The plug is hammered into a formed 19mm diameter hole in the concrete structure or supported by a pin from the inside of the formwork during pouring. This can have been formed by a pin during casting or through drilling. The internal diameter is sized to accept 14mm diameter components such as a formed metal bar or the Caswick hammer in cable support system.

Code	A (internal diameter)	B (plug length)	C (plug diameter)
SP196	14 mm	84 mm	20 mm



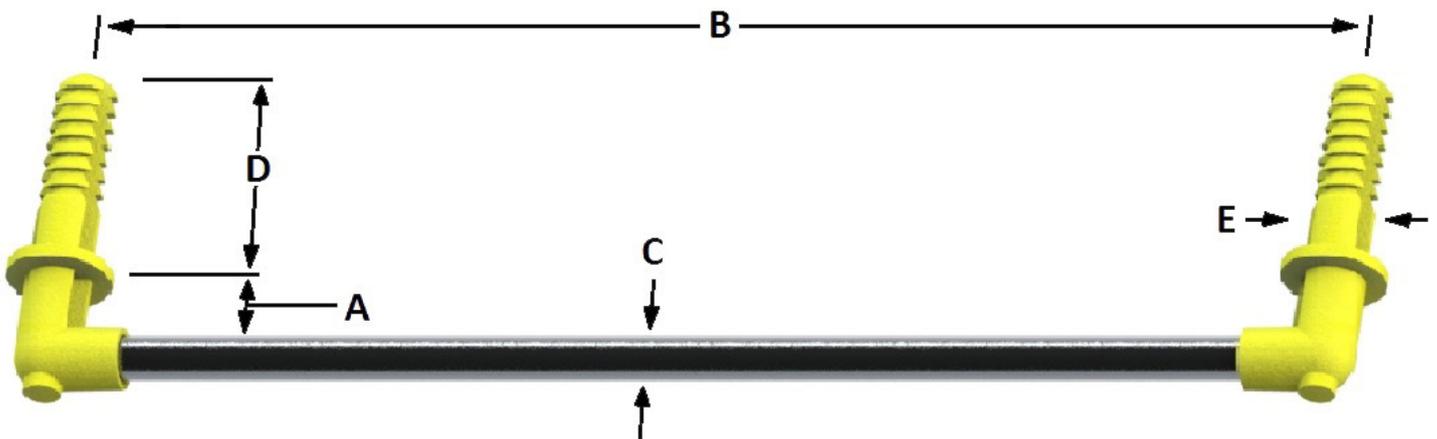
**Plug 14mm Open**

The plug is supported by a pin on the outside of the concrete formwork whilst the concrete is poured. The internal diameter is sized to accept 14mm diameter components such as a formed metal bar or the Caswick hammer in cable support system.

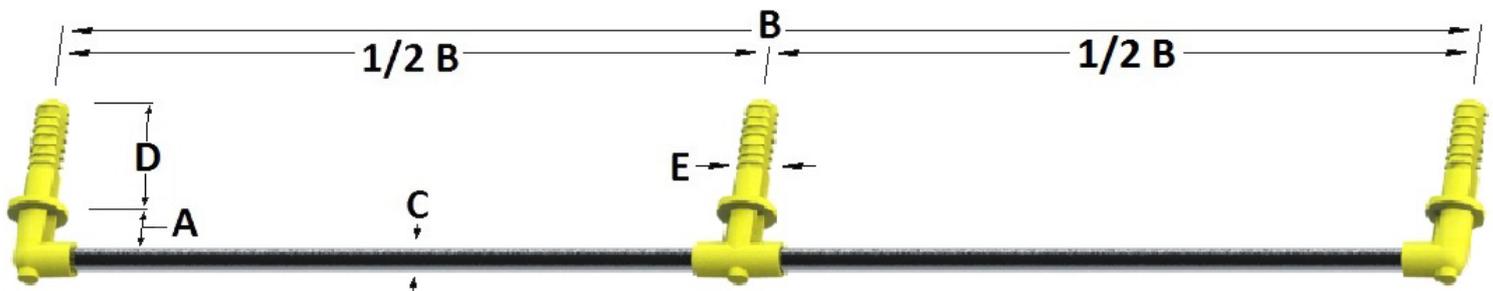
Code	A (internal diameter)	B (plug length)	C (plug diameter)
SP204	14 mm	84 mm	20 mm

**Cable holder**

The cable holder is intended to route cables around the communications chamber to keep them out of harms way. Cables can be hung over it, tied to it or other accessories can be used to hang the cables. It comprises of two or three plastic plugs which support a length of aluminium tube. The plugs are hammered into two holes 19mm diameter formed in the concrete communication chamber wall. The holes can be formed by pins at the time of casting or through drilling once the concrete has hardened.



**Cable hanger without central support**

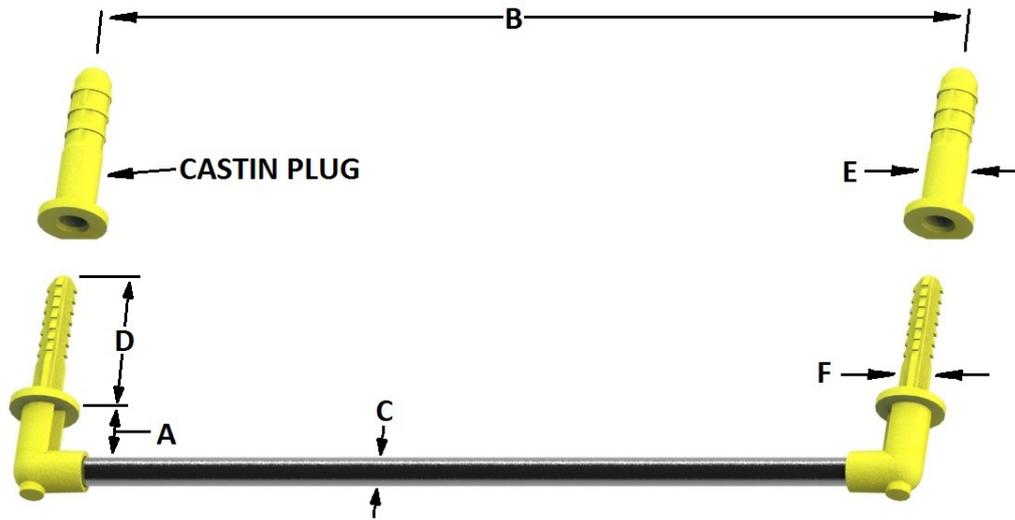


**Cable hanger with central support**

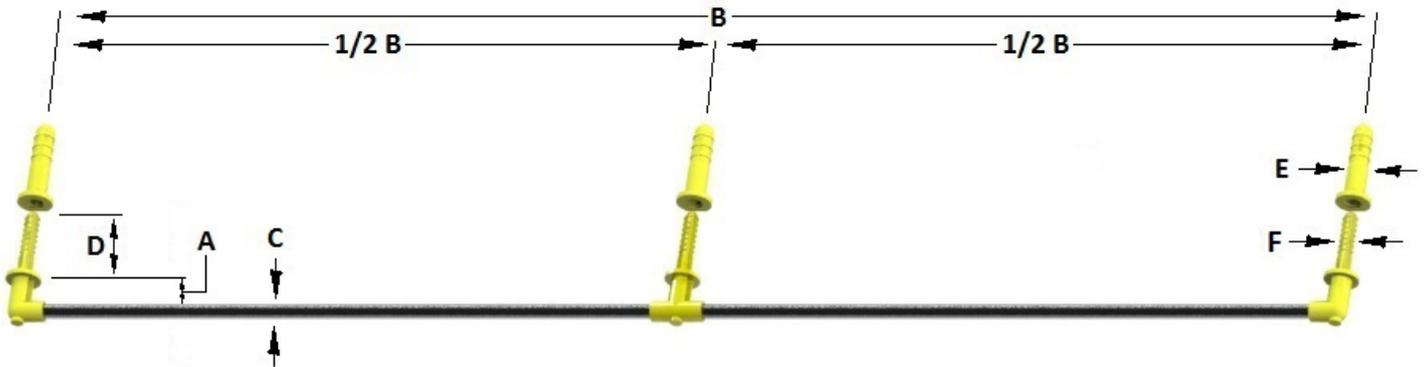
Caswick code	Afnor NF P98-050-1 reference	A (space behind bar)	B (hole centres)	C (wire thickness)	D (hole depth)	E (plug diameter)	Central support?
	L1T / L1C	25 mm	430 mm	14 mm	80 mm	20 mm	No
	L2T / L2C	25 mm	1060 mm	14 mm	80 mm	20 mm	No
	L3T / L3C	25 mm	1200 mm	14 mm	80 mm	20 mm	Yes
	L4T	25 mm	1680 mm	14 mm	80 mm	20 mm	No
	0.5 L4T	25 mm	790 mm	14 mm	80 mm	20 mm	Yes
	K1C	25 mm	585 mm	14 mm	80 mm	20 mm	No
	K2C	25 mm	1285 mm	14 mm	80 mm	20 mm	Yes
	K3C	25 mm	2040 mm	14 mm	80 mm	20 mm	Yes

**Cable holder - hammer into inserts**

The cable holder comprises of two or three plastic plugs which support a length of aluminium tube. The plugs are hammered into corresponding Caswick inserts as shown on page 1 of this brochure once the concrete has hardened. The plastic inserts shown on page 1 are installed at the time of casting the concrete. The cables are then tucked behind or hung over the aluminium bar or brackets can be hung from the bar which in turn support the cables.



**CABLE HANGER WITHOUT CENTRAL SUPPORT**



**CABLE HANGER WITH CENTRAL SUPPORT**

Caswick code	Afnor NF P98-050-1 reference	A (space behind bar)	B (hole centres)	C (wire thickness)	D (hole depth)	E (plug diameter)	F (Barb diameter)	Central support?
	L1T / L1C	31 mm	430 mm	14 mm	80 mm	20 mm	14.5mm	No
	L2T / L2C	31 mm	1060 mm	14 mm	80 mm	20 mm	14.5mm	No
	L3T / L3C	31 mm	1200 mm	14 mm	80 mm	20 mm	14.5mm	Yes
	L4T	31 mm	1680 mm	14 mm	80 mm	20 mm	14.5mm	No
	0.5 L4T	31 mm	790 mm	14 mm	80 mm	20 mm	14.5mm	Yes
	K1C	31 mm	585 mm	14 mm	80 mm	20 mm	14.5mm	No
	K2C	31 mm	1285 mm	14 mm	80 mm	20 mm	14.5mm	Yes
	K3C	31 mm	2040 mm	14 mm	80 mm	20 mm	14.5mm	Yes

## Cable holder - hanging clip

The hanging clip allows a second cable support rail to be fitted allowing expanded organisation options. The hanger can be fitted to all version of cable hanging system using the appropriate aluminium tube.

Caswick Code	Vertical drop
SP208	150mm

