

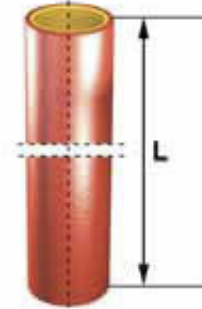
Code Description Size

ENSIGN

ENSIGN pipes and fittings must only be assembled with PAM RAPID W2 couplings

ENSIGN PIPE 3 METRE

E156342	40mm
E156360	50mm
E156454	70mm
E156452	75mm
E156560	100mm
E156733	125mm
E156824	150mm
E156948	200mm
E157047	250mm
E157112	300mm

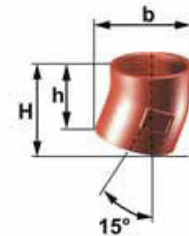


SECTION 4

ENSIGN FITTINGS

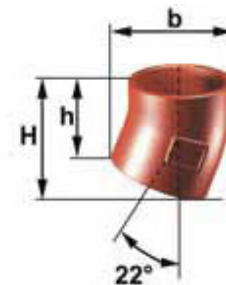
15° BEND

E155752	50
E155781	70
E155816	100
E155870	125
E155903	150
E155932	200



22° BEND

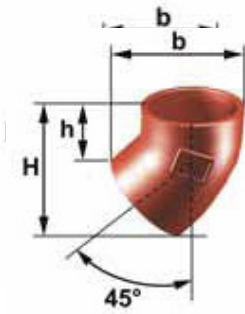
E156388	50
E156480	75
E156598	100
E156761	125
E156855	150
E156974	200
E157071	250
E157136	300



Code Description Size

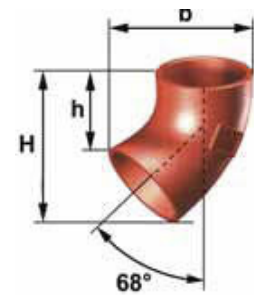
30° BEND

E155753		50
E155782		70
E155817		100
E155871		125
E155904		150
E155933		200
E155948		250
E155960		300



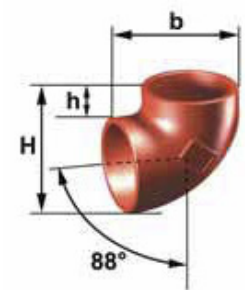
45° BEND

E156348		40mm
E156384		50mm
E155780		70mm
E156476		75mm
E156593		100mm
E156756		125mm
E156850		150mm
E156970		200mm
E157069		250mm
E157134		300mm

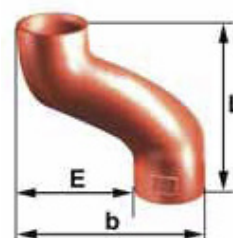


67° BEND

E156382		50mm
E155779		70mm
E156474		75mm
E156591		100mm
E156754		125mm
E156847		150mm
E156968		200mm
E157067		250mm
E157132		300mm



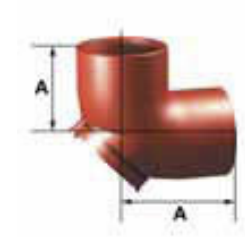
Code	Description	Size
87° BEND		
E156346		40mm
E156379		50mm
E155778		70mm
E156471		75mm
E156588		100mm
E156752		125mm
E156844		150mm
E156966		200mm
E157065		250mm
E157130		300mm
135° BEND		
E155818		100mm
45° BEND - EXTENDED END		
E155786		70mm
E155824		100mm
E155785		70mm
E155823		100mm
88° LARGE RADIUS BEND		
E156606		100mm
E156860		150mm
87° DOUBLE BEND		
E155754		50mm
E155783		70mm
E155819		100mm
E155872		125mm
E155905		150mm
87° BEND WITH SIDE VENT DN50		
E157581		100mm
87° BEND WITH BACK VENT DN50		
E156585		100mm



Code Description Size

88° BEND - SHORT RADIUS WITH DOOR BACK

E156472		70mm
E156589		100mm
E156845		150mm
E156607		100mm



S BEND OFFSET 75

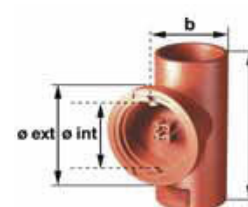
E156386		50mm
E156478		75mm
E156596		100mm
E156759		125mm
E156853		150mm
E156972		200mm

S BEND OFFSET 150

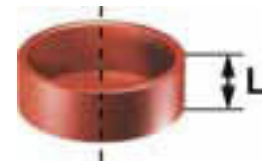
E156390		50mm
E156482		75mm
E156604		100mm
E156764		125mm
E156858		150mm
E156976		200mm

SHORT PIPE / ACCESS DOOR

E156414		50mm
E156513		75mm
E156659		100mm
E156794		125mm
E156905		150mm
E157015		200mm
E157098		250mm
E157161		300mm



Code	Description	Size
PLUG		
E156376		50mm
E155776		70mm
E156466		75mm
E156581		100mm
E156749		125mm
E156841		150mm
E156963		200mm
E157062		250mm
E157127		300mm



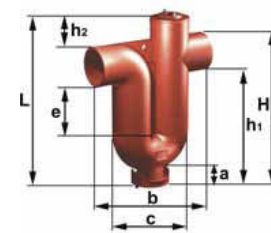
EXPANSION PLUG

E156374		50mm
E156468		70mm
E156464		75mm
E156579		100mm
E156747		125mm
E156839		150mm
E156961		200mm
E157060		250mm
E157125		300mm



SIPHON

E156420		50mm
E156521		70mm
E156519		75mm
E156668		100mm
E156801		125mm
E156912		150mm
E157018		200mm

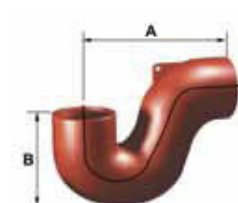


TRAP WITHOUT ACCESS DOOR

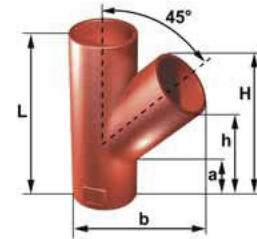
E156666		100mm
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SECTION 4

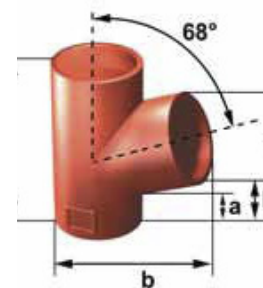
Code	Description	Size
TRAP WITH ACCESS DOOR		
E156419		50mm
E156518		70mm
E156667		100mm
E156911		150mm
P TRAP WITH VENT. DN50		
E156670		100mm
S TRAP WITH VENT. DN50		
E156672		100mm
ANTISYPHONAGE TRAP		
E156352		40mm
E156422		50mm
E156522		75mm
E179013		100mm
E156916		150mm



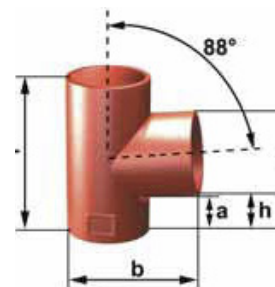
Code	Description	Size
45° SINGLE BRANCH		
E156356		40 x 40mm
E156392		50 x 40mm
E156435		50 x 50mm
E155789		70 x 50mm
E156490		75 x 50mm
E155806		70 x 70mm
E156544		75 x 75mm
E156618		100 x 50mm
E155831		100 x 70mm
E156625		100 x 75mm
E156701		100 x 100mm
E156769		125 x 50mm
E155879		125 x 70mm
E156771		125 x 75mm
E156775		125 x 100mm
E156813		125 x125mm
E155910		150 x70mm
E176733		150 x 75mm
E156879		150 x100mm
E156883		150 x125mm
E156931		150 x 150mm
E156982		200 x 100mm
E156984		200 x125mm
E156989		200 x150mm
E157030		200 x200mm
E157073		250 x100mm
E157074		250 x125mm
E157075		250 x150mm
E157078		250 x 200mm
E157106		250 x 250mm
E157138		300 x 100mm
E157139		300 x125mm
E157140		300x150mm
E157141		300 x200mm
E157142		300 x250mm
E157169		300 x 300mm



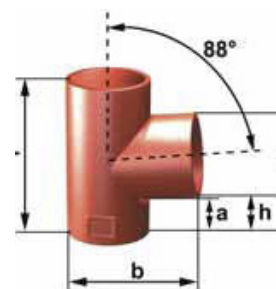
Code	Description	Size
67° SINGLE BRANCH		
E156433		50 x 50mm
E155788		70 x 50mm
E155805		70 x 70mm
E156488		75 x 50mm
E156542		75 x 75mm
E156616		100 x 50mm
E155830		100 x 70mm
E156623		100 x 75mm
E156699		100 x 100mm
E156773		125 x 100mm
E156811		125 x 125mm
E156877		150 x 100mm
E156881		150 x 125mm
E156929		150 x 150mm
E156987		200x150mm
E157027		200 x 200mm
E157076		250 x 200mm
E157104		250 x 250mm
E157167		300 x 300mm



87° SINGLE BRANCH		
E156431		50 x 50mm
E155787		70 x 50mm
E155804		70 x 70mm
E156486		75 x 50mm
E156538		75 x 75mm
E156613		100 x 50mm
E155829		100 x 70mm
E156620		100 x 75mm
E156695		100 x 100mm
E156768		125 x 50mm
E155878		125 x 70mm
E155880		125 x 100mm
E156809		125 x 125mm



Code	Description	Size
E156870		150 x50mm
E156872		150 x70mm
E156872		150 x75mm
E156874		150 x100mm
E155913		150 x125mm
E156925		150 x150mm
E156980		200 x100mm
E157024		200 x 200mm
E157102		250 x 250mm
E157165		300 x 300mm



SECTION 4

87° SINGLE BRANCH - LARGE RADIUS

E156696		100 x 100mm
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87° S. BRANCH WITH ACCESS - RADIUS CURVE

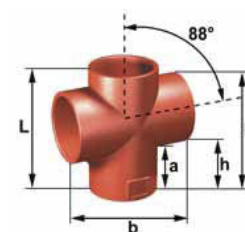
E156614		100 x 50mm
E156697		100 x100mm
E156875		150 x 100mm
E156927		150 x 150mm

87° S. BRANCH RADIUS CURVE

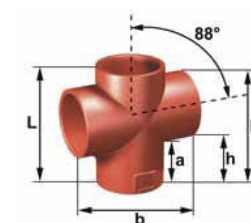
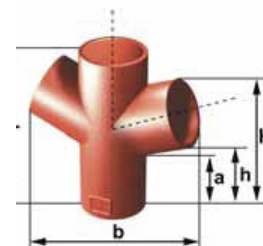
E156539		70 x70mm
E156611		100 x 50mm
E156612		100 x 70mm
E156869		150x100mm
E156926		150x150mm
E156985		200x150mm
E157025		200x200mm

45° DOUBLE BRANCH

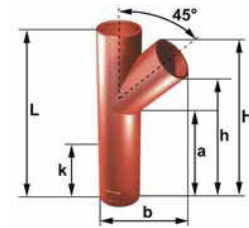
E156709		100 x100mm
E156817		125 x125mm
E156865		150 x100mm
E156936		150 x150mm
E157034		200x200mm



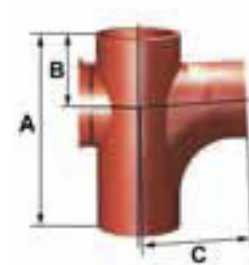
Code	Description	Size
67° DOUBLE BRANCH		
E156437		50x50mm
E156484		75 x50mm
E156546		75 x75mm
E156609		100 x75mm
E156707		100 x100mm
E156766		125 x100mm
E156815		125 x125mm
E156863		150 x100mm
E156867		150 x125mm
E156934		150 x150mm
E156978		200 x150mm
E157032		200 x200mm
87° DOUBLE BRANCH		
E155825		100x50mm
E155826		100x70mm
E156704		100x100mm
E155874		125x100mm
E155907		150x100mm
87° DOUBLE BRANCH RADIUS CURVE		
E156862		150x100mm
45° RIGHT ANGLE DBLE BRANCH		
E156716		100x100mm
67° RIGHT ANGLE DBLE BRANCH		
E156548		75x75mm
E156714		100x100mm
87° RIGHT ANGLE DBLE BRANCH		
E155839		100 x 70mm
E156712		100x100mm
E155888		125 x 70mm
E155889		125 x 100mm
E155919		150 x 100mm



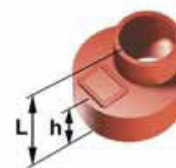
Code	Description	Size
45° S. BRANCH LONG TAIL		
E156723		100x100mm
E156938		150x150mm
E157036		200x200mm
67° S. BRANCH LONG TAIL		
E156721		100x100mm
87° S. BRANCH LONG TAIL		
E156720		100x100mm
E156725		100x100mm
LONG ARM STACK BRANCH		
E156726		100x100mm
PARALLEL BRANCH		
E155832		100x70mm
88° SINGLE BRANCH - RADIUS CURVE W/ DOOR		
E156540		70 x 70mm
E156621		100x70mm
E156697		100x100mm
E156875		150x100mm
E156927		150x150mm
88° DBLE BRANCH - RADIUS CURVE		
E157643		100x100mm
E156862		150x100mm
ROOF CONNECTOR		
E156576		100x100mm



SECTION 4



Code	Description	Size
S.STACK FITTING 3 INLETS		
E177237		100x100mm
S.STACK FITTING 2 INLETS		
E177236		100x100mm
FITTING S. STACK 2 PARA INLETS		
E177235		100x100mm
REDUCER		
E156354		50x40mm
E155763		70x50mm
E156424		75x50mm
E156426		100x50mm
E155801		100x70mm
E156526		100x75mm
E156428		125x50mm
E155802		125x70mm
E156684		125x100mm
E156430		150x50mm
E155803		150x70mm
E156530		150x75mm
E156686		150x100mm
E156805		150x125mm
E156532		200x75mm
E156688		200x100mm
E156807		200x125mm
E156919		200x150mm
E156534		250x75mm
E156690		250x100mm
E156921		250x150mm
E157020		250x200mm
E156536		300x75mm
E156692		300x100mm
E156923		300x150mm
E157022		300x200mm
E157100		300x250mm



Code Description Size

87° WC BEND CONNECTOR

E155852
E155853
E155854
E155850
E155849

STACK SUPPORT PIPE WITHOUT WALL SUPPORT

E156413	50mm
E177742	70mm
E156512	75mm
E156657	100mm
E156793	125mm
E156904	150mm
E157014	200mm
E157097	250mm
E157160	300mm



Code Description Size

ENSIGN PLUS

ENSIGN PLUS pipes and fittings must be assembled with PAM RAPID W5 couplings

ENSIGN PLUS PIPE LENGTH 3M

E155296	40mm
E155301	50mm
E155321	70mm
E155320	75mm
E155347	100mm
E155390	125mm
E155412	150mm
E155446	200mm
E155474	250mm
E155491	300mm

ENSIGN PLUS 15° BEND

E155375	100mm
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ENSIGN PLUS 22° BEND

E155308	50mm
E155327	75mm
E155358	100mm
E155396	125mm
E155421	150mm
E155455	200mm
E155482	250mm
E155499	300mm

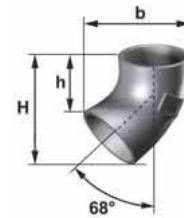


ENSIGN PLUS 45° BEND

E155298	40mm
E155306	50mm
E155325	75mm
E155356	100mm
E155395	125mm
E155420	150mm
E155453	200mm
E155481	250mm
E155498	300mm



Code	Description	Size
ENSIGN PLUS 67° BEND		
E155305		50mm
E155324		75mm
E155355		100mm
E155394		125mm
E155419		150mm
E155452		200mm
E155480		250mm
E155497		300mm
ENSIGN PLUS 87° BEND		
E155297		40mm
E155305		50mm
E155324		75mm
E155353		100mm
E155393		125mm
E155418		150mm
E155451		200mm
E155479		250mm
E155496		300mm
ENSIGN PLUS 87° BEND WITH SIDE VENT DN50		
E155352		100mm
ENSIGN PLUS 87° DOUBLE BEND		
E155359		100mm
E155422		150mm
ENSIGN PLUS LONG TAIL BRANCH 45°		
E155381		100mm
E155443		150mm
E155471		200mm
ENSIGN PLUS S BEND OFFSET E=150MM		
E155361		100mm
ENSIGN PLUS LONG ARM STACK BRANCH		
E155389		100mm



SECTION 4

SECTION 4

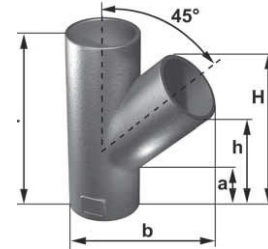
PIPING SYSTEMS

SECTION 4

Code Description Size

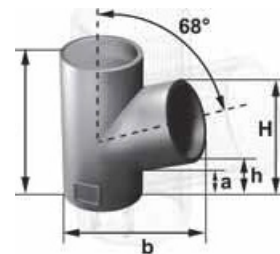
ENSIGN PLUS 45° SINGLE Y BRANCH

E155300	45° single Y branch	40x40mm
E155316	45° single Y branch	50X50mm
E155331	45° single Y branch	75x50mm
E155344	45° single Y branch	75x75mm
E155365	45° single Y branch	100x50mm
E155368	45° single Y branch	100x75mm
E155380	45° single Y branch	100x100mm
E155398	45° single Y branch	125x50mm
E155400	45° single Y branch	125x100mm
E155409	45° single Y branch	125x125mm
E155430	45° single Y branch	150x100mm
E155432	45° single Y branch	150x125mm
E155442	45° single Y branch	150x150mm
E155459	45° single Y branch	200x100mm
E155461	45° single Y branch	200x150mm
E155470	45° single Y branch	200x200mm
E155483	45° single Y branch	250x200mm
E155490	45° single Y branch	250x250mm
E155500	45° single Y branch	300x250mm
E155507	45° single Y branch	300x300mm

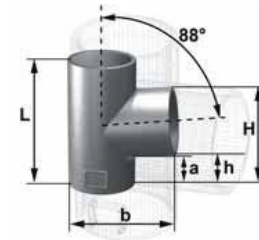


ENSIGN PLUS 67° SINGLE Y BRANCH

E155315	67° single Y branch	50X50mm
E155330	67° single Y branch	75X50mm
E155343	67° single Y branch	75x75mm
E155364	67° single Y branch	100X50mm
E155367	67° single Y branch	100X75mm
E155379	67° single Y branch	100x100mm
E155399	67° single Y branch	125x100mm
E155408	67° single Y branch	125x125mm
E155429	67° single Y branch	150x100mm
E155431	67° single Y branch	150x125mm
E155441	67° single Y branch	150x150mm
E155460	67° single Y branch	200x150mm
E155469	67° single Y branch	200x200mm
E155484	67° single Y branch	250x200mm
E155489	67° single Y branch	250x250mm
E155506	67° single Y branch	300x300mm



Code	Description	Size
ENSIGN PLUS 87° SINGLE BRANCH		
E155314	87° single branch	50x50mm
E155329	87° single branch	75x50mm
E155342	87° single branch	75x75mm
E155363	87° single branch	100x50mm
E155366	87° single branch	100x75mm
E155378	87° single branch	100x100mm
E155407	87° single branch	125x125mm
E155428	87° single branch	150x100mm
E155407	87° single branch	150x150mm
E155457	87° single branch	200x100mm
E155468	87° single branch	200x200mm
E155488	87° single branch	250x250mm
E155505	87° single branch	300x300mm



ENSIGN PLUS LONG TAIL BRANCH 45°

E155381	long tail branch 45°	100x100mm
E155443	long tail branch 45°	150x150mm
E155471	long tail branch 45°	200x200mm

ENSIGN PLUS LONG TAIL BRANCH 67°

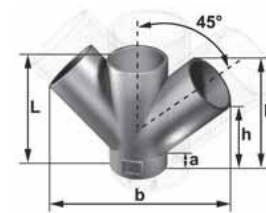
E155388	long tail branch 67°	100x100mm
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ENSIGN PLUS LONG ARM STACK BRANCH

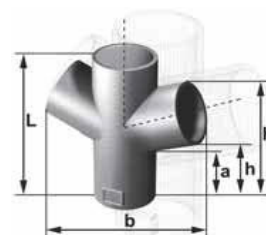
E155389	long arm stack branch	100x100mm
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ENSIGN PLUS 45° DOUBLE Y BRANCH

E155384	45° double Y branch	100x100mm
E155411	45° double Y branch	125x125mm
E155445	45° double Y branch	150x150mm
E155473	45° double Y branch	200x200mm



Code	Description	Size
ENSIGN PLUS 67° DOUBLE Y BRANCH		
E155317		50X50mm
E155328		75x50mm
E155345		75x75mm
E155362		100x75mm
E155383		100x100mm
E155397		125x100mm
E155410		125x125mm
E155426		150x125mm
E155444		150x150mm
E155456		200x150mm
E155472		200x200mm



ENSIGN PLUS 87° DOUBLE Y BRANCH

E155382		100x100mm
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ENSIGN PLUS 45° RIGHT ANGLE DBL BRANCH

E155387	45° right angle dbl branch	100x100mm
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ENSIGN PLUS 87° RIGHT ANGLE DBL BRANCH

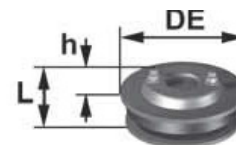
E155385	87° right angle dbl branch	100x100mm
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ENIGN PLUS 67° RIGHT ANGLE DBL BRANCH

E155346	67° right angle dbl branch	75x75mm
E155386	67° right angle dbl branch	100x100mm

ENSIGN PLUS EXPANSION PLUG

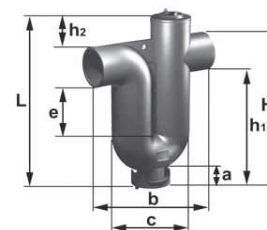
E155303		50mm
E155322		75mm
E155351		100mm
E155392		125mm
E155417		150mm
E155450		200mm
E155478		250mm
E155495		300mm



Code Description Size

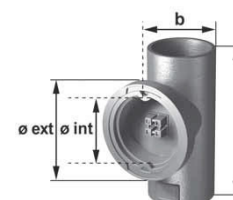
ENSIGN PLUS SIPHON

E155311	50mm
E155334	75mm
E155372	100mm
E155404	125mm
E155436	150mm
E155464	200mm



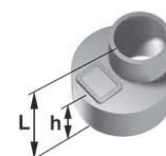
ENSIGN PLUS SHORT PIPE / ACCESS DOOR

E155310	50mm
E155332	75mm
E155370	100mm
E155403	125mm
E155435	150mm
E155463	200mm
E155486	250mm
E155503	300mm



ENSIGN PLUS REDUCER

E155312	50x75mm
E155313	50x100mm
E155337	75x100mm
E173808	50x125mm
E155338	75x125mm
E155374	100x125mm
E155339	75x150mm
E155375	100x150mm
E155405	125x150mm
E155340	75x200mm
E155376	100x200mm
E155406	125x200mm
E155439	150x200mm
E155341	75x250mm
E155377	100x250mm
E155437	150x250mm
E155465	200x250mm
E155373	100x300mm
E155438	150x300mm
E155466	200x300mm
E155487	300x250mm



Code Description Size

ENSIGN COUPLINGS

PAM GLOBAL RAPID W2 COUPLING

E157586		40mm
E210424		50mm
E210425		70mm
E210426		75mm
E210427		100mm
E210428		125mm
E210429		150mm
E210430		200mm



PAM GLOBAL RAPID W5 COUPLING

E157587		40mm
E185635		50mm
E207818		70mm
E207819		75mm
E185636		100mm
E207820		125mm
E207831		150mm
E185637		200mm
E183457		250mm
E183458		300mm

GRIP COLLAR FOR PAM GLOBAL RAPID

E155743		40mm
E155761		50mm
E155796		70mm
E155835		100mm
E155885		125mm
E155916		150mm
E155939		200mm

GRIP COLLAR FOR EXPANSION PLUG

E156407	Grip collar for expansion plug	50mm
E156504	Grip collar for expansion plug	70mm
E156644	Grip collar for expansion plug	100mm
E156785	Grip collar for expansion plug	125mm
E156897	Grip collar for expansion plug	150mm

Code	Description	Size
E157008	Grip collar for expansion plug	200mm
E157092	Grip collar for expansion plug	250mm
E157155	Grip collar for expansion plug	300mm

ENSIGN ACCESSORIES

STEPPING RING

E156399	stepping ring	50mm
E156495	stepping ring	75mm
E156494	stepping ring	75mm
E156555	stepping ring	90mm
E156635	stepping ring	100mm
E156778	stepping ring	125mm
E157000	stepping ring	200mm
E157085	stepping ring	250mm



CONNECTING JOINT TO OTHER MATERIALS

E155001	Connecting joint to other materials	75mm
E155002	Connecting joint to other materials	100mm
ETXB10NP01	Connecting joint to other materials	100mm
ETXB12NL0G	Connecting joint to other materials	125mm
ETXB15NM0J	Connecting joint to other materials	150mm
E155003	Connecting joint to other materials	150mm
ETXB20NL0K	Connecting joint to other materials	200mm
ETXB20NN0K	Connecting joint to other materials	200mm
E155004	Connecting joint to other materials	200mm



WC CONNECTOR

E156132	WC connector	100mm
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JL RING FOR CAST IRON WC CONNECTOR

E156132		100mm
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Code	Description	Size
UNIVERSAL PLUG		
E156394		50mm
E156492		75mm
E156628		100mm
E156629		100mm
WALL HOOK TYPE 101		
E156409		50mm
E156506		75mm
E156647		100mm
E156786		125mm
E156899		150mm
E157009		200mm
E157093		250mm
E157156		300mm
HANGING BRACKET TYPE 401		
E156410		50mm
E156507		75mm
E156648		100mm
E156787		125mm
E156900		150mm
E157010		200mm
E157094		250mm
E157157		300mm
VERTICAL BRACKET TYPE 802		
E156411		50mm
E156508		75mm
E156649		100mm
E156788		125mm
E156901		150mm
ANTIVIBATION PIPE BRACKET		
E181618		40mm
E173628		50mm
E173629		75mm
E173630		100mm
E173641		125mm
E173642		150mm
E173643		200mm
E173644		250mm
E173645		300mm

Code **Description** **Size**

WALL SUPPORT FOR STACK SUPPORT PIPE 1PCE

E173646		50mm
E173646		75mm
E173647		100mm
E173647		125mm
E173647		150mm
E173648		200mm
E173649		250mm
E173649		300mm

ELECTRICAL CONTINUITY CLIP

E156395		50mm
E156631		100mm
E156996		200mm

RED PAINT

E156340		1kg
E156412		5kg

E170897 endokote red colour

MOVEMENT COMPENSATOR - SMALL SCOPE

E155050		75mm
E172638		100mm
E155067		125mm
E155072		150mm
E155077		200mm

MOVEMENT COMPENSATOR - LARGE SCOPE

E155051		75mm
E155063		100mm
E155068		125mm
E155073		150mm
E155078		200mm

Movement on 3 axes to be detailed on demand