

The PRESSFIT/JPRESS Jointing System from Pressfit Holdings plc

PRESSFIT/JPRESS range of pressfittings are products made by the UK incorporated public limited company-Pressfit Holdings plc-with manufacturing base in China. Pressfit Holdings plc, through its fully owned subsidiaries, HK based Pressfit International Enterprise Limited and China incorporated Heze City Fengyi Pipe Industry Co. Ltd, uses its own innovative technology to manufacture the M-profile high-precision thin-walled stainless steel and carbon steel pressfittings to supply global commercial and industrial markets. Combination of high quality products in full compliance with European material and mechanical standards and affordability sets PRESSFIT/JPRESS apart from most of its global competitors.

Pressfit Holdings plc continuously strives to become a leading force within the plumbing and heating industry by providing high quality products and optimal level of support to end users. PRESSFIT/JPRESS press system portfolio comprised of the stainless steel pressfittings and tubes and the carbon steel pressfittings and tubes pipe systems. PRESSFIT/JPRESS products are manufactured using unique and ingenious machinery at the company's self-owned modern factory. The PRESSFIT/JPRESS system consists of fittings and tubes which are used in conjunction with various brands of press tools and it offers a comprehensive and complete solution to installers with greater level of overall flexibility.

Advantages of PRESSFIT/JPRESS M-profile Press System

- *Flameless*: PRESSFIT/JPRESS Press System connects pipeline components without using a heat source and thus there is no need to purchase expensive insurance policies. No threading, soldering, brazing or welding are needed and installers enjoy enhanced safety levels as the danger of fire damage is excluded.
- *Fast*: Simple clamping is all it needs to secure a joint in seconds as compared to much longer installation time for traditional jointing methods, such as welding, threading or roll-grooving.
- *Consistent Quality*: The quality of the jointing is ensured by the tool and not the operator and this guarantees constant quality.
- *Simple*: Only the durable and easy-to-operate pressing tools are needed to make the connections. Gases, adhesives, threading machines are no longer needed.
- *Cost Savings*: Because it's fast, flameless, simple and foolproof, Press System provides considerable savings as compared to other jointing systems.
- *Strong and Reliable Mechanical Jointing*: The pressed joint results in an extremely secure connection and a strong deformation of the O-ring bead to form a permanent seal.
- *Wide Applications*: Different types of O-rings allow wide variety of applications and the choice of stainless steel and carbon steel suits different project needs.
- *Light Weight*: Thin-walled Press System is relatively light weight.

- *Need Small Space:* Bends with small radius result in a more compact jointing which increases the flexibility of installation.
- *Easy to Detect Faulty Joint:* It is easier to detect any damage or misplacement as the positioning of the O-ring at the beginning of the fitting is highly visible to the installer.
- *Environmentally Friendly:* As the installation process is clean-no welding rods, smoke or cutting oils, using Press System helps the environment.
- *Comply with European Standard:* Pressfit Holdings plc is dedicated to designing, developing and manufacturing high quality products. PRESSFIT/JPRESS range pressfitting and tube products, where applicable, comply with the relevant British, European and International standards.
- *Aesthetic Benefits:* Press System creates consistent professional appearance at the jointing contact point. Especially for stainless steel systems which do not require a corrosion allowance or coatings and blend well with modern architecture and interior design, the whole systems can be left visible to the eye if required. Stainless steel will not rust and keep its appearance.

PRESSFIT/JPRESS System Areas of Application

Potable Water Installation

PRESSFIT/JPRESS stainless steel pressfittings with stainless steel tubes are approved according to UK WARS Crimp Fitting test codes for potable water installations, such as water supply and rain water installations, potable water for industrial applications, wet and dry fire mains, conditioned water such as softened water or distilled water. The O-rings used for potable water installations are EPDM (black) O-rings with operating temperature from -40 °C to +110 °C and maximum operating pressure at 16 bar.

Water Heating Installation

PRESSFIT/JPRESS carbon steel pressfittings with zinc plated precision carbon steel tubes approved according EN 10305-3 can be used in closed loop heating installations. The O-rings used water heating installations are EPDM (black) O-rings with operating temperature from -40 °C to +110 °C and maximum operating pressure at 16 bar.

PRESSFIT/JPRESS stainless steel and carbon steel pressfittings with matching stainless steel and carbon steel tubes are highly cost effective systems in plant through reduction of down time, fast, clean and flexible assembly. The PRESSFIT/JPRESS Press System is suitable for numerous process lines in many industries, such as Automotive, General Manufacturing Plant and machinery, Construction, Chemical, Pharmaceutical industry, Food, Shipbuilding, etc. Areas where the systems can be utilized include process and cooling, compressed air, oils and fuel, technical liquids and gases, fire extinguishing systems (both stainless steel and carbon steel tubes are considered as incombustible tubes), drinking water pipes, saturated steam, detergents and disinfectant, heating and cooling, etc. All PRESSFIT/JPRESS stainless steel and carbon steel pressfittings are fitted as standard with an EPDM O-ring unless required otherwise by installers.

The choice of material of fittings and O-rings depend on the assembly situation, the medium and system operating conditions. Always make sure that installations comply with local regulations.

Product Guarantees

The pipe and fittings manufacturer shall warrant that the pipe and fittings are free from defects and conform to the designated standard. The warranty shall only be applicable to pipe and fittings installed in accordance with the manufacturer's installation instructions. For the actual terms of guarantee on PRESSFIT/JPRESS Press System, please contact your local agent. In general, a 5 YEAR GUARANTEE is provided by the manufacturer for Carbon Steel pressfittings and tubes against all manufacturing defects and a 20 YEAR GUARANTEE is provided by the manufacturer for Stainless Steel pressfittings and tubes against all manufacturing defects. The manufacturer of the pipe and fittings shall not be responsible for the improper use, handling, or installation of the product.

Approvals



PRESSFIT/JPRESS stainless steel pressfittings are tested and approved according to UK WRAS Crimp Fitting mechanical and material test codes.

Tubes

Stainless Steel Tubes:

Stainless steel tubes are made from 316L (1.4404) grade stainless steel or 304 (1.4301) to BS EN 10312 (Series 2) for 15-54mm and DVGW GW541 for 76-108mm. The following table shows the dimensions and product codes:

Outside Diameter	Wall Thickness	Product Code for 304 SS Tubes	Product Code for 316L SS Tubes
15mm	1.0mm	840001	860001
18mm	1.0mm	840002	860002
22mm	1.2mm	840003	860003
28mm	1.2mm	840004	860004
35mm	1.5mm	840005	860005
42mm	1.5mm	840006	860006
54mm	1.5mm	840007	860007
76mm	2.0mm	840008	860008
89mm	2.0mm	840009	860009
108mm	2.0mm	840010	860010

Carbon Steel Tubes:

Thin-walled precision carbon steel tubes are manufactured from ultra light carbon steel E195 according to BS EN 10305-3. The resulting product is very easy to bend and is protected against external corrosion by a coating of zinc-plating. Below is a summary of the tube specifications for BS EN 10305-3:

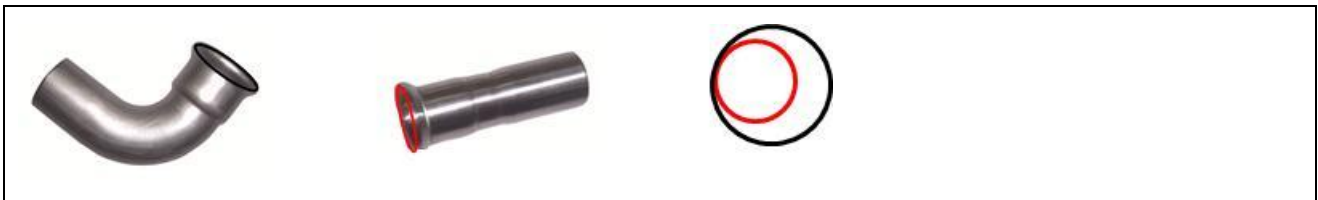
Outside Diameter	Wall Thickness	Product Code for Carbon Steel Tubes
15mm	1.2mm	880001
18mm	1.2mm	880002
22mm	1.5mm	880003
28mm	1.5mm	880004
35mm	1.5mm	880005
42mm	1.5mm	880006
54mm	1.5mm	880007
76mm	2.0mm	880008
89mm	2.0mm	880009
108mm	2.0mm	880010

Both stainless steel and carbon steel tubes are supplied in 5.8m long pieces with clear marking of PRESSFIT/JPRESS trademarks and sizes.

Connectors

The PRESSFIT/JPRESS product range includes components with inner and outer threads for connection with other threaded parts of a tube network. PRESSFIT/JPRESS connectors have inner and outer threads according to ISO 7/EN 10226-1. Flanged adapters are also available. To avoid stress to the pressfitting joint, threaded connections are recommended to be carried out before the pressing.

O-ring Type



The PRESSFIT/JPRESS pressfittings are manufactured with a high quality EPDM O-ring installed at the factory. EPDM, or ethylenepropylene-dienemonomer, possesses excellent resistance to aging, weathering, sunlight, environmental influences, and most alkaline solutions and chemicals used in a broad range of applications. The EPDM O-ring is ideal for seals in heating systems, fittings, and household appliances as it has particularly good resistance to hot water. Other commonly used O-rings include NBR and Silicon Rubber. Below is a summary characteristics of each type of O-rings.

Material: EPDM

Colour: Black

Operating Temperature: -40/+110°C

Applications: All installations for potable water and processed water, heating, low-pressure steam, fire sprinkler, and compressed air installations, etc.

Material: NBR

Colour: Black

Operating Temperature: -25/+110°C

Applications: Fire sprinkler system, petroleum and pharmaceutical industries, oil and gasoline transportation

Material: Silicon Rubber

Colour: Blue

Operating Temperature: -40/+180°C

Applications: Special applications which require high temperature tolerance level, such as for gas and steam pipework.

Pressing Tools



Battery or electrically powered press tools consist of a press machine and the corresponding press jaws or slings. To ensure perfectly tight connections, only the respective press jaws and slings should be used for each tube diameter. All PRESSFIT/JPRESS pressfittings with a diameter from 15 mm to 108 mm can be pressed using the press machines listed in the product range.

Press tools approved for pressing PRESSFIT/JPRESS range of stainless steel and carbon steel products are:

Dimensions	Manufacturer	Press Machine	Jaws
15-54mm	Klauke	UAP2	M profile Jaws 15-54mm
15-54mm	Rems	Powerpress E, Powerpress ACC, Akku-Press ACC	M profile Jaws 15-54mm
15-54mm	Ridgid	RP330	M profile Jaws 15-54mm
15-54mm	Novopress	ECO301	M profile Jaws 15-54mm
15-54mm	Rothenberger	ROMAX 3000	M profile Jaws 15-54mm
76-108mm	Klauke	UAP100Big	Slings 76-108mm
76-108mm	Novopress	ECO301	Slings and adapters 76-108mm

Note: Other models from the above or different manufacturers can be approved on request. Regular lubrication and maintenance of the press jaws, slings and tools is necessary, and please follow the manufacturer's instructions for use and maintenance.

Fitting Markings

Each fitting is marked with the following:

- PRESSFIT/JPRESS Trademarks
- Material Code (prefix “L” indicates 316L stainless steel, prefix “C” for carbon steel and without prefix “L” or “C” refers to 304 stainless steel)
- Fitting Type Code
- Fitting Dimension

Installation Guidelines



The below is a general guideline for completing a pressing joint for both stainless steel and carbon steel systems:

1. **Cutting and Deburring:** After measuring, the tubes are cut to length using a tube cutter which must be compatible with stainless steel. The tube should always be cut completely and it should never be partially cut and then broken off as this could cause corrosion. The tube ends must be carefully deburred inside and out after being cut to length in order to avoid damage to the O-ring when inserting the tube into the pressfitting. Deburring the inside of tubes prevents pitting corrosion.
2. **Marking the Insertion Depth:** The necessary insertion depth must be marked on the tube in order to guarantee a safe and proper pressing. Only proper installation can ensure a guaranteed pressing of the connection as pressing behind the crimp is vital to ensure adequate tensile strength for a tight joint. The marking on the tube must still be visible on the tube after pressing.
3. **Control and Preparation:** Before pressing, check the pressfitting has a functional O-ring and remove any foreign matters, e.g. dirt or burring, etc. from inside and outside of pipe and fittings. The pipe end shall also be wiped clean and dry.

4. **Insert the Tube into Pressfitting:** The tube is inserted into the fitting until it meets the tube stop. The marking of the insertion depth should still be visible. If needed, use water as a lubricant to insert the tube. Oils, fats or grease should not be used as lubricants as it will cause damage to the O-ring.

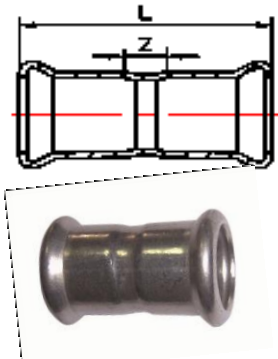
5. **Jointing:** After inserting the correctly sized jaws into the press tool, place them over the bead at the mouth of the fitting. A 90 °angle between tube and jaws should be maintained to ensure a tight jointing. Push the Start button will commence the compression cycle of the tool, and the jaws fully enclose the mouth of the fitting. The jaws should then be released from around the fitting and the pressing is completed. Pressure testing is to be carried out in accordance with local codes afterwards to locate any unpressed connections.

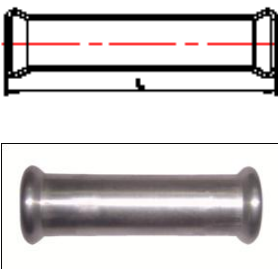
Pressure Testing

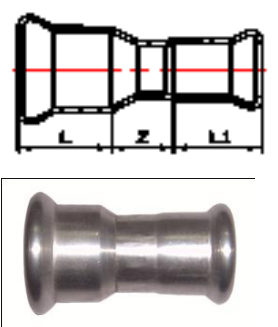
Before taking the installation into use and before the tube system is integrated into the building structure by subsequent works, the finished pipe system must undergo a pressure test. The tube sections should be filled with filtered water for the pressure test and subject to 1.5 times the maximum permissible operating pressure (DIN 1988, part 2).

Dimensional Documentation

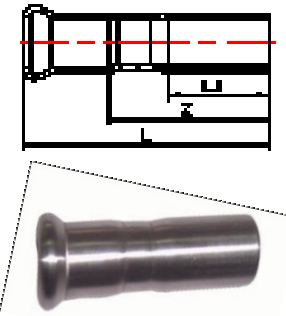
316L Stainless Steel Pressfitting

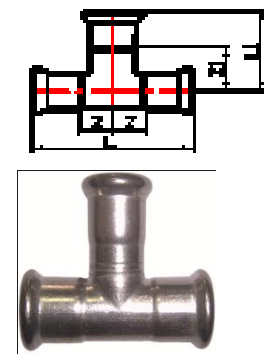
Straight Coupler	Product Code	Size	L	Z
	861101	LS15	48	8
	861102	LS18	48	8
	861103	LS22	50	8
	861104	LS28	54	8
	861105	LS35	62	10
	861106	LS42	71	9
	861107	LS54	83	13
	861108	LS76	141	35
	861109	LS89	162	42
	861110	LS108	194	44

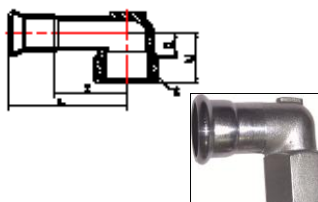
Slip Coupler	Product Code	Size	L
	861201	LWD15	80
	861202	LWD18	80
	861203	LWD22	84
	861204	LWD28	91
	861205	LWD35	102
	861206	LWD42	120
	861207	LWD54	140
	861208	LWD76	230
	861209	LWD89	260
	861210	LWD108	300

Reduced straight coupler	Product Code	Size	L	L1	Z
	861301	LSE22×15	21	20	33
	861302	LSE28×15	23	20	36
	861303	LSE28×22	23	21	36
	861304	LSE35×22	26	21	39
	861305	LSE35×28	26	23	41
	861306	LSE42×28	31	23	41
	861307	LSE42×35	31	26	39
	861308	LSE54×28	35	23	48
	861309	LSE54×35	35	26	41
	861310	LSE54×42	35	31	41

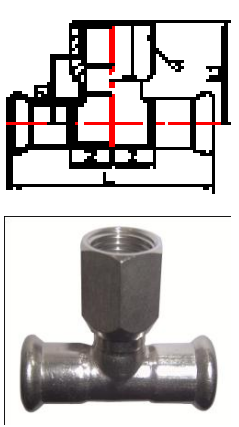
316L Stainless Steel Pressfitting

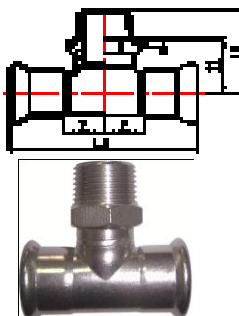
Fitting reducer	Product Code	Size	L	L1	Z
	861401	LDSE18×15	58±3	24	38
	861402	LDSE22×15	64±3	25	44
	861403	LDSE28×15	72±3	26	52
	861404	LDSE22×18	58±3	25	38
	861405	LDSE28×18	65±3	26	45
	861406	LDSE28×22	64±3	26	43
	861407	LDSE35×18	81±4	28	61
	861408	LDSE35×22	80±4	28	59
	861409	LDSE35×28	74±4	28	51
	861410	LDSE42×22	95±4	38	74
	861411	LDSE42×28	89±4	38	66
	861412	LDSE42×35	88±4	38	62
	861413	LDSE54×18	116±4	42	96
	861414	LDSE54×22	115±4	42	94
	861415	LDSE54×28	106±4	42	83
	861416	LDSE54×35	105±4	42	79
	861417	LDSE54×42	100±4	42	69

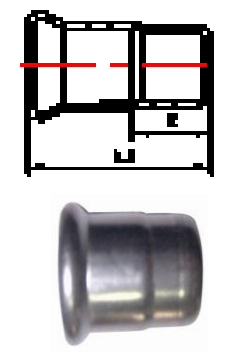
Equal Tee	Product Code	Size	L	Z	L1	Z1
	861501	LT15	64	12	40.5	20.5
	861502	LT18	68	14	44	24
	861503	LT22	74	16	47	26
	861504	LT28	84	19	52	29
	861505	LT35	100	24	58	32
	861506	LT42	116	27	66	35
	861507	LT54	138	34	77	42
	861508	LT76	230	62	109	56
	861509	LT89	260	70	124	63.5
	861510	LT108	310	80	148	73

90° Bend with Female Thread	Product Code	Size	L	L1	Z	Z1	S
	861601	LDRP15×1/2"	51	28.4	31	11.6	24
	861602	LDRP18×1/2"	52	28.9	32	13.1	24
	861603	LDRP22×1/2"	53	26.15	32	15.85	24
	861604	LDRP22×3/4"	56	31.15	35	15.85	30
	861605	LDRP22×1"	60	44.15	39	15.85	38
	861606	LDRP28×1"	64	45.35	41	18.65	38

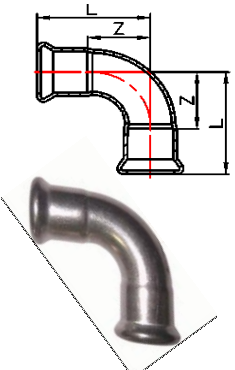
316L Stainless Steel Pressfitting

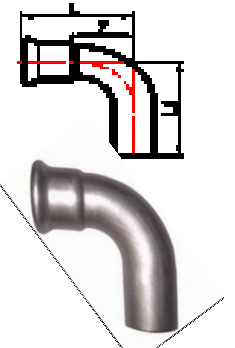
Tee with Female Thread Branch	Product Code	Size	L	L1	Z	Z1	S
	861701	LTRP15×1/2"	64	43.5	12	28.3	24
	861702	LTRP18×1/2"	68	44	14	38.75	24
	861703	LTRP22×1/2"	74	46	16	31.25	24
	861704	LTRP22×3/4"	74	48.5	16	31.95	30
	861705	LTRP28×1/2"	84	51	19	31.65	24
	861706	LTRP28×3/4"	84	53	19	36.45	30
	861707	LTRP28×1"	84	56	19	36.65	38
	861708	LTRP35×1/2"	100	54	24	38.25	24
	861709	LTRP35×1"	100	60	24	38.35	46
	861710	LTRP42×1"	116	63	27	41.75	55
	861711	LTRP54×1/2"	138	63	34	47.75	24
	861712	LTRP54×2"	138	74	34	48.05	65


Tee with Male Thread Branch	Product Code	Size	L	L1	Z	Z1	S
	861801	LTR15×1/2"	64	41	12	27.5	22
	861803	LTR18×1/2"	74	44	16	30.5	24
	861804	LTR22×3/4"	74	45	16	30.5	28
	861805	LTR28×1/2"	84	48	19	35	22
	861806	LTR28×3/4"	84	50	19	35	28
	861807	LTR28×1"	84	53	19	36	36
	861810	LTR42×1 1/2"	116	63	27	44	50
	861811	LTR54×1/2"	138	62	34	56	22
	861812	LTR54×2"	138	76	34	51.5	60

Stop End	Product Code	Size	L	Z
	861901	LD15	35	15
	861902	LD18	36	16
	861903	LD22	37	16
	861904	LD28	41	18
	861905	LD35	45	19
	861906	LD42	50	19
	861907	LD54	56	21
	861908	LD76	74	21
	861909	LD89	82	22
	861910	LD108	97	22

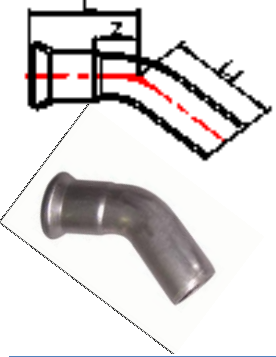
316L Stainless Steel Pressfitting

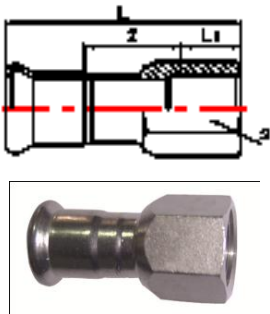
90' Bend	Product Code	Size	L	Z
	862101	LW15	39	19
	862102	LW18	45	25
	862103	LW22	48	27
	862104	LW28	57	34
	862105	LW35	69	43
	862106	LW42	87	56
	862107	LW54	107	72
	862108	LW76	150	97
	862109	LW89	173	113
	862110	LW108	214	139

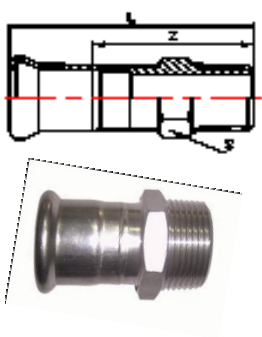
90' Street Bend	Product Code	Size	L	L1	Z
	862201	LWC15	39	45	19
	862202	LWC18	45	51	25
	862203	LWC22	48	54	27
	862204	LWC28	57	63	34
	862205	LWC35	69	75	43
	862206	LWC42	87	93	56
	862207	LWC54	107	113	72
	862208	LWC76	150	167	97
	862209	LWC89	173	188	113
	862210	LWC108	214	235	139

45' Obtuse Elbow 45°	Product Code	Size	L	Z
	862301	LWV15	31	11
	862302	LWV18	32	12
	862303	LWV22	35	14
	862304	LWV28	40	17
	862305	LWV35	46.5	20.5
	862306	LWV42	56	25
	862307	LWV54	67	32
	862308	LWV76	94	41
	862309	LWV89	106	46
	862310	LWV108	138	63

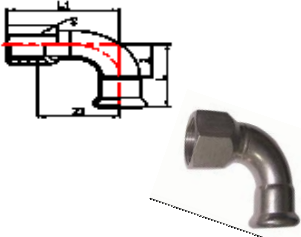
316L Stainless Steel Pressfitting

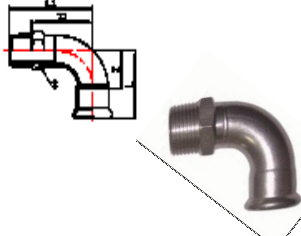
45° Obtuse Street Elbow	Product Code	Size	L	L1	Z
	862401	LWCV15	32.5	38	12.5
	862402	LWCV18	33.5	38	13.5
	862403	LWCV22	36.5	42	15.5
	862404	LWCV28	41.5	46	18.5
	862405	LWCV35	46.5	52	20.5
	862406	LWCV42	56	63	25
	862407	LWCV54	67	73	32
	862408	LWCV76	94	115	41
	862409	LWCV89	106	125	46
	862410	LWCV108	138	159	63

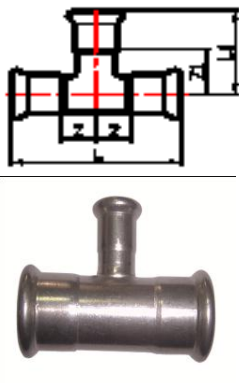
Female Straight Connector	Product Code	Size	L	L1	Z	S
	862501	LSRP15×1/2"	59	15.25	23.75	24
	862502	LSRP15×3/4"	61	16.55	24.75	30
	862503	LSRP18×1/2"	60	15.25	24.75	24
	862504	LSRP18×3/4"	62	16.55	25.45	30
	862505	LSRP22×1/2"	61	15.25	24.75	24
	862506	LSRP28×1"	69	19.35	24.65	38
	862507	LSRP35×1 1/4"	72	21.65	24.35	46
	862508	LSRP42×1 1/2"	74	21.25	24.75	55
	862509	LSRP54×2"	88	25.95	26.05	65

Male Straight Connector	Product Code	Size	L	Z	S
	862601	LSR15×1/2"	59	39	22
	862602	LSR15×3/4"	61	41	28
	862603	LSR18×1/2"	60	40	22
	862604	LSR18×3/4"	62	42	28
	862605	LSR22×1/2"	61	40	22
	862606	LSR22×3/4"	62	41	28
	862607	LSR28×1"	69	46	36
	862608	LSR35×1 1/4"	72	46	43
	862609	LSR42×1 1/2"	74	43	50
	862610	LSR54×2"	88	53	60

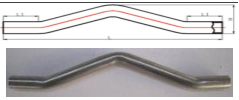
316L Stainless Steel Pressfitting

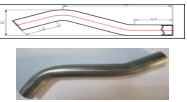
90' Bend with Female	Product Code	Size	L	L1	Z	Z1	S
	862701	LWRP15×1/2"	39	52	19	34.75	24
	862702	LWRP18×1/2"	45	56	25	40.75	24
	862703	LWRP22×3/4"	48	61	27	43.45	30
	862704	LWRP28×1"	57	69	34	46	38
	862705	LWRP35×1 1/4"	69	79	43	57.35	46
	862706	LWRP42×1 1/2"	87	93	56	71.75	55
	862707	LWRP54×2"	107	113	72	87.05	65

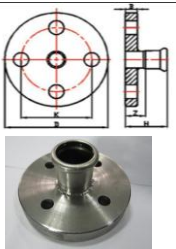
90' Bend with Male Thread	Product Code	Size	L	L1	Z	Z1	S
	862801	LWR15×1/2"	39	51	19	32	22
	862802	LWR18×1/2"	45	55	25	40	22
	862803	LWR22×3/4"	48	60.5	27	42	28
	862804	LWR28×1"	57	69	34	50	36
	862805	LWR35×1 1/4"	69	79	43	60	43
	862806	LWR42×1 1/2"	87	93	56	74	50
	862807	LWR54×2"	107	115	72	90.5	60

Reduced Tee Branch	Product Code	Size	L	Z	L1	Z1
	862901	LTE18×15	68	14	43	23
	862902	LTE22×15	74	16	45	25
	862903	LTE22×18	74	16	46	26
	862904	LTE28×15	84	19	48	28
	862905	LTE28×18	84	19	49	29
	862906	LTE28×22	84	19	50	29
	862907	LTE35×15	100	24	50	30
	862908	LTE35×18	100	24	51	31
	862909	LTE35×22	100	24	53	32
	862910	LTE35×28	100	24	55	32
	862911	LTE42×22	116	27	56	35
	862912	LTE42×35	116	27	61	35
	862913	LTE54×22	138	34	62	41
	862914	LTE54×28	138	34	64	41
	862915	LTE54×35	138	34	67	41
	862916	LTE54×42	138	34	71	40

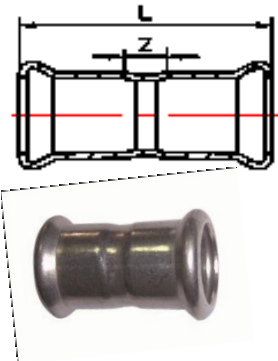
316L Stainless Steel Pressfitting

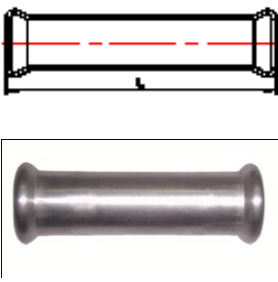
Long pipe bridge	Product Code	Size	L	L1	H
	863001	LZG15	234	37	44
	863002	LZG22	256	41	53
	863003	LZG28	284	48	64

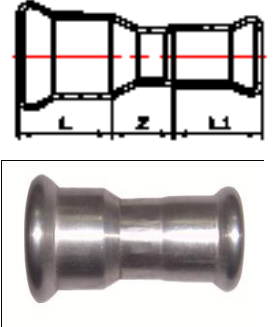
Short pipe bridge	Product Code	Size	L	L1	H
	863101	LDG15	97	31	44
	863102	LDG22	118	43	53
	863103	LDG28	144	54	64

Flange	Product Code	Size	Z	D	H	K	B	Holes
	863201	LF15	18.5	95	38.5	65	11	4
	863202	LF18	19.5	95	39.5	65	11	4
	863203	LF22	20.5	105	41.5	75	12	4
	863204	LF28	24.5	115	47.5	85	14	4
	863205	LF35	23.5	140	49.5	100	15	4
	863206	LF42	24.5	150	55.5	110	16	4
	863207	LF54	28.5	165	63.5	125	18	4

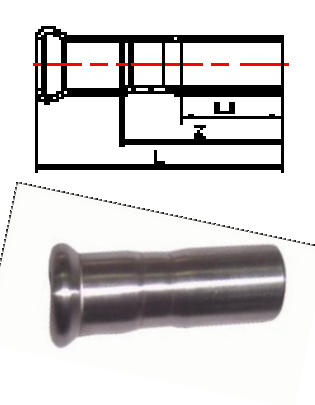
304 Stainless Steel Pressfitting

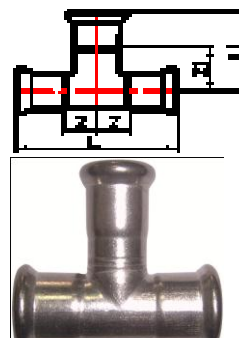
Straight Coupler	Product Code	Size	L	Z
	841101	S15	48	8
	841102	S18	48	8
	841103	S22	50	8
	841104	S28	54	8
	841105	S35	62	10
	841106	S42	71	9
	841107	S54	83	13
	841108	S76	141	35
	841109	S89	162	42
	841110	S108	194	44

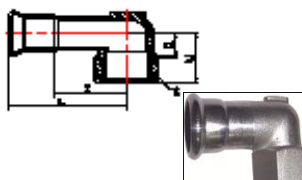
Slip Coupler	Product Code	Size	L
	841201	WD15	80
	841202	WD18	80
	841203	WD22	84
	841204	WD28	91
	841205	WD35	102
	841206	WD42	120
	841207	WD54	140
	841208	WD76	230
	841209	WD89	260
	841210	WD108	300

Reduced straight coupler	Product Code	Size	L	L1	Z
	841301	SE22×15	21	20	33
	841302	SE28×15	23	20	36
	841303	SE28×22	23	21	36
	841304	SE35×22	26	21	39
	841305	SE35×28	26	23	41
	841306	SE42×28	31	23	41
	841307	SE42×35	31	26	39
	841308	SE54×28	35	23	48
	841309	SE54×35	35	26	41
	841310	SE54×42	35	31	41

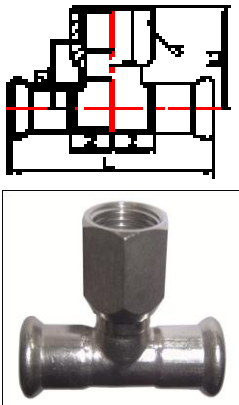
304 Stainless Steel Pressfitting

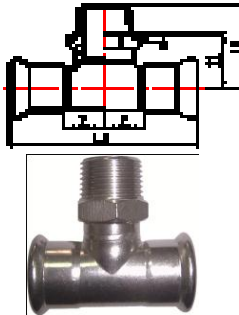
Fitting reducer	Product Code	Size	L	L1	Z
	841401	DSE18×15	58±3	24	38
	841402	DSE22×15	64±3	25	44
	841403	DSE28×15	72±3	26	52
	841404	DSE22×18	58±3	25	38
	841405	DSE28×18	65±3	26	45
	841406	DSE28×22	64±3	26	43
	841407	DSE35×18	81±4	28	61
	841408	DSE35×22	80±4	28	59
	841409	DSE35×28	74±4	28	51
	841410	DSE42×22	95±4	38	74
	841411	DSE42×28	89±4	38	66
	841412	DSE42×35	88±4	38	62
	841413	DSE54×18	116±4	42	96
	841414	DSE54×22	115±4	42	94
	841415	DSE54×28	106±4	42	83
	841416	DSE54×35	105±4	42	79
	841417	DSE54×42	100±4	42	69

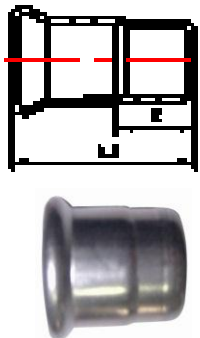
Equal Tee	Product Code	Size	L	Z	L1	Z1
	841501	T15	64	12	40.5	20.5
	841502	T18	68	14	44	24
	841503	T22	74	16	47	26
	841504	T28	84	19	52	29
	841505	T35	100	24	58	32
	841506	T42	116	27	66	35
	841507	T54	138	34	77	42
	841508	T76	230	62	109	56
	841509	T89	260	70	124	63.5
	841510	T108	310	80	148	73

90° Female Thread	Product Code	Size	L	L1	Z	Z1	S
	841601	DRP15×1/2"	51	28.4	31	11.6	24
	841602	DRP18×1/2"	52	28.9	32	13.1	24
	841603	DRP22×1/2"	53	26.15	32	15.85	24
	841604	DRP22×3/4"	56	31.15	35	15.85	30
	841605	DRP22×1"	60	44.15	39	15.85	38
	841606	DRP28×1"	64	45.35	41	18.65	38

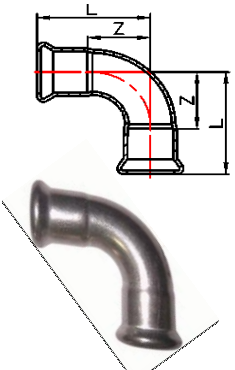
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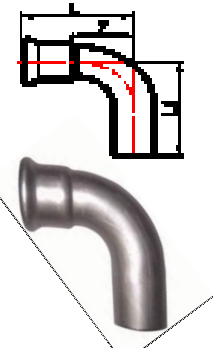
Tee with Female Thread Branch	Product Code	Size	L	L1	Z	Z1	S
	841701	TRP15×1/2"	64	43.5	12	28.3	24
	841702	TRP18×1/2"	68	44	14	38.75	24
	841703	TRP22×1/2"	74	46	16	31.25	24
	841704	TRP22×3/4"	74	48.5	16	31.95	30
	841705	TRP28×1/2"	84	51	19	31.65	24
	841706	TRP28×3/4"	84	53	19	36.45	30
	841707	TRP28×1"	84	56	19	36.65	38
	841708	TRP35×1/2"	100	54	24	38.25	24
	841709	TRP35×3/4"	100	60	24	38.35	46
	841710	TRP42×1 1/2"	116	63	27	41.75	55
	841711	TRP54×1/2"	138	63	34	47.75	24
	841712	TRP54×2"	138	74	34	48.05	65


Tee with Male Thread Branch	Product Code	Size	L	L1	Z	Z1	S
	841801	TR15×1/2"	64	41	12	27.5	22
	841803	TR22×1/2"	74	44	16	30.5	24
	841804	TR22×3/4"	74	45	16	30.5	28
	841805	TR28×1/2"	84	48	19	35	22
	841806	TR28×3/4"	84	50	19	35	28
	841807	TR28×1"	84	53	19	36	36
	841810	TR42×1 1/2"	116	63	27	44	50
	841811	TR54×1/2"	138	62	34	56	22
	841812	TR54×2"	138	76	34	51.5	60

Stop End	Product Code	Size	L	Z
	841901	D15	35	15
	841902	D18	36	16
	841903	D22	37	16
	841904	D28	41	18
	841905	D35	45	19
	841906	D42	50	19
	841907	D54	56	21
	841908	D76	74	21
	841909	D89	82	22
	841910	D108	97	22

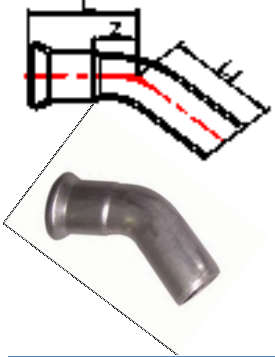
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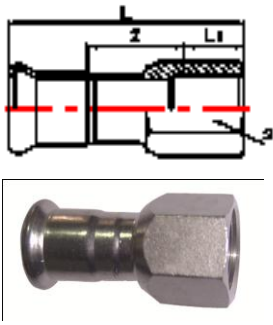
90' Bend	Product Code	Size	L	Z
	842101	W15	39	19
	842102	W18	45	25
	842103	W22	48	27
	842104	W28	57	34
	842105	W35	69	43
	842106	W42	87	56
	842107	W54	107	72
	842108	W76	150	97
	842109	W89	173	113
	842110	W108	214	139

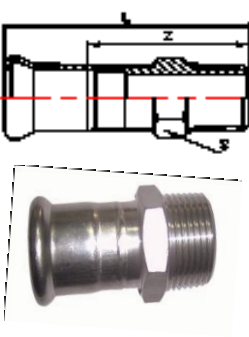
90' Street Bend	Product Code	Size	L	L1	Z
	842201	WC15	39	45	19
	842202	WC18	45	51	25
	842203	WC22	48	54	27
	842204	WC28	57	63	34
	842205	WC35	69	75	43
	842206	WC42	87	93	56
	842207	WC54	107	113	72
	842208	WC76	150	167	97
	842209	WC89	173	188	113
	842210	WC108	214	235	139

45' Obtuse Elbow 45°	Product Code	Size	L	Z
	842301	WV15	31	11
	842302	WV18	32	12
	842303	WV22	35	14
	842304	WV28	40	17
	842305	WV35	46.5	20.5
	842306	WV42	56	25
	842307	WV54	67	32
	842308	WV76	94	41
	842309	WV89	106	46
	842310	WV108	138	63

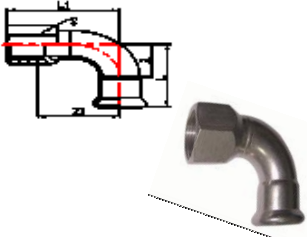
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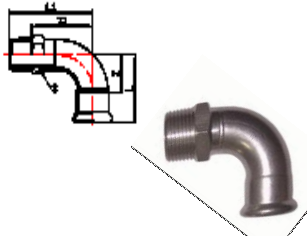
45° Obtuse Street Elbow	Product Code	Size	L	L1	Z
	842401	WCV15	32.5	38	12.5
	842402	WCV18	33.5	38	13.5
	842403	WCV22	36.5	42	15.5
	842404	WCV28	41.5	46	18.5
	842405	WCV35	46.5	52	20.5
	842406	WCV42	56	63	25
	842407	WCV54	67	73	32
	842408	WCV76	94	115	41
	842409	WCV89	106	125	46
	842410	WCV108	138	159	63

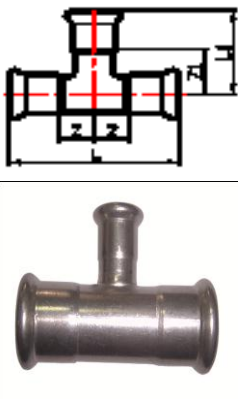
Female Straight Connector	Product Code	Size	L	L1	Z	S
	842501	SRP15×1/2"	59	15.25	23.75	24
	842502	SRP15×3/4"	61	16.55	24.75	30
	842503	SRP18×1/2"	60	15.25	24.75	24
	842504	SRP18×3/4"	62	16.55	25.45	30
	842505	SRP22×1/2"	61	15.25	24.75	24
	842506	SRP28×1"	69	19.35	24.65	38
	842507	SRP35×1 1/4"	72	21.65	24.35	46
	842508	SRP42×1 1/2"	74	21.25	24.75	55
	842509	SRP54×2"	88	25.95	26.05	65

Male Straight Connector	Product Code	Size	L	Z	S
	842601	SR15×1/2"	59	39	22
	842602	SR15×3/4"	61	41	28
	842603	SR18×1/2"	60	40	22
	842604	SR18×3/4"	62	42	28
	842605	SR22×1/2"	61	40	22
	842606	SR22×3/4"	62	41	28
	842607	SR28×1"	69	46	36
	842608	SR35×1 1/4"	72	46	43
	842609	SR42×1 1/2"	74	43	50
	842610	SR54×2"	88	53	60

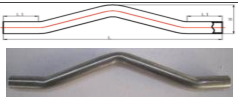
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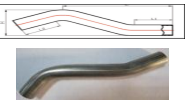
90' Bend with Female	Product Code	Size	L	L1	Z	Z1	S
	842701	WRP15×1/2"	39	52	19	34.75	24
	842702	WRP18×1/2"	45	56	25	40.75	24
	842703	WRP22×3/4"	48	61	27	43.45	30
	842704	WRP28×1"	57	69	34	46	38
	842705	WRP35×1 1/4"	69	79	43	57.35	46
	842706	WRP42×1 1/2"	87	93	56	71.75	55
	842707	WRP54×2"	107	113	72	87.05	65

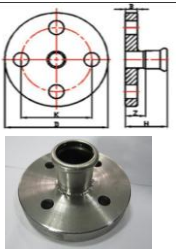
90' Bend with Male Thread	Product Code	Size	L	L1	Z	Z1	S
	842801	WR15×1/2"	39	51	19	32	22
	842802	WR18×1/2"	45	55	25	40	22
	842803	WR22×3/4"	48	60.5	27	42	28
	842804	WR28×1"	57	69	34	50	36
	842805	WR35×1 1/4"	69	79	43	60	43
	842806	WR42×1 1/2"	87	93	56	74	50
	842807	WR54×2"	107	115	72	90.5	60

Reduced Tee Branch	Product Code	Size	L	Z	L1	Z1
	842901	TE18×15	68	14	43	23
	842902	TE22×15	74	16	45	25
	842903	TE22×18	74	16	46	26
	842904	TE28×15	84	19	48	28
	842905	TE28×18	84	19	49	29
	842906	TE28×22	84	19	50	29
	842907	TE35×15	100	24	50	30
	842908	TE35×18	100	24	51	31
	842909	TE35×22	100	24	53	32
	842910	TE35×28	100	24	55	32
	842911	TE42×22	116	27	56	35
	842912	TE42×35	116	27	61	35
	842913	TE54×22	138	34	62	41
	842914	TE54×28	138	34	64	41
	842915	TE54×35	138	34	67	41
	842916	TE54×42	138	34	71	40

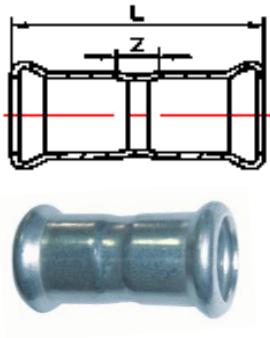
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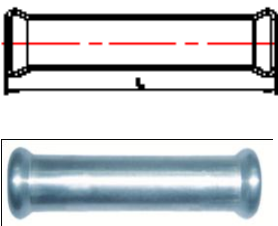
Long pipe bridge	Product Code	Size	L	L1	H
	843001	ZG15	234	37	44
	843002	ZG22	256	41	53
	843003	ZG28	284	48	64

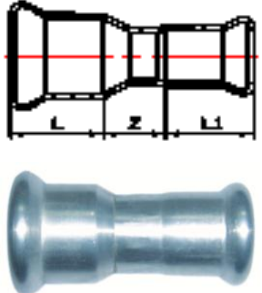
Short pipe bridge	Product Code	Size	L	L1	H
	843101	DG15	97	31	44
	843102	DG22	118	43	53
	843103	DG28	144	54	64

Flange	Product Code	Size	Z	D	H	K	B	Holes
	843201	F15	18.5	95	38.5	65	11	4
	843202	F18	19.5	95	39.5	65	11	4
	843203	F22	20.5	105	41.5	75	12	4
	843204	F28	24.5	115	47.5	85	14	4
	843205	F35	23.5	140	49.5	100	15	4
	843206	F42	24.5	150	55.5	110	16	4
	843207	F54	28.5	165	63.5	125	18	4

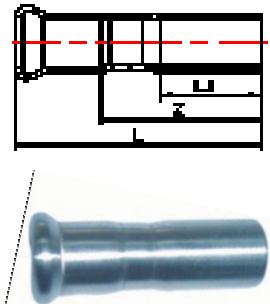
Carbon Steel Pressfitting

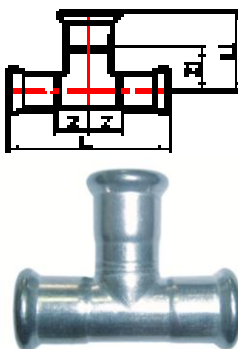
Straight Coupler	Product Code	Size	L	Z
	881101	CS15	48	8
	881102	CS18	48	8
	881103	CS22	50	8
	881104	CS28	54	8
	881105	CS35	62	10
	881106	CS42	71	9
	881107	CS54	83	13
	881108	CS76	141	35
	881109	CS89	162	42
	881110	CS108	194	44

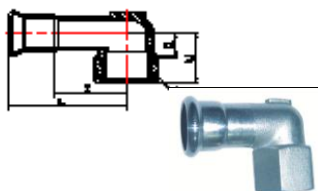
Slip Coupler	Product Code	Size	L
	881201	CWD15	80
	881202	CWD18	80
	881203	CWD22	84
	881204	CWD28	91
	881205	CWD35	102
	881206	CWD42	120
	881207	CWD54	140
	881208	CWD76	230
	881209	CWD89	260
	881210	CWD108	300

Reduced straight coupler	Product Code	Size	L	L1	Z
	881301	CSE22×15	21	20	33
	881302	CSE28×15	23	20	36
	881303	CSE28×22	23	21	36
	881304	CSE35×22	26	21	39
	881305	CSE35×28	26	23	41
	881306	CSE42×28	31	23	41
	881307	CSE42×35	31	26	39
	881308	CSE54×28	35	23	48
	881309	CSE54×35	35	26	41
	881310	CSE54×42	35	31	41

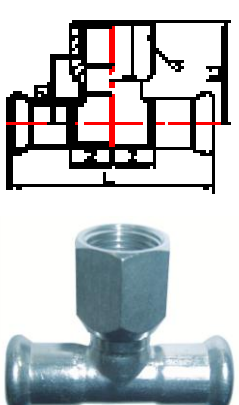
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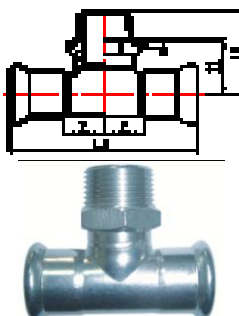
Fitting reducer	Product Code	Size	L	L1	Z
	881401	CDSE18×1	58±3	24	38
	881402	CDSE22×1	64±3	25	44
	881403	CDSE28×1	72±3	26	52
	881404	CDSE22×1	58±3	25	38
	881405	CDSE28×1	65±3	26	45
	881406	CDSE28×2	64±3	26	43
	881407	CDSE35×1	81±4	28	61
	881408	CDSE35×2	80±4	28	59
	881409	CDSE35×2	74±4	28	51
	881410	CDSE42×2	95±4	38	74
	881411	CDSE42×2	89±4	38	66
	881412	CDSE42×3	88±4	38	62
	881413	CDSE54×1	116±4	42	96
	881414	CDSE54×2	115±4	42	94
	881415	CDSE54×2	106±4	42	83
	881416	CDSE54×3	105±4	42	79
	881417	CDSE54×4	100±4	42	69

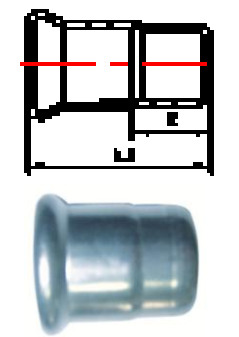
Equal Tee	Product Code	Size	L	Z	L1	Z1
	881501	CT15	64	12	40.5	20.5
	881502	CT18	68	14	44	24
	881503	CT22	74	16	47	26
	881504	CT28	84	19	52	29
	881505	CT35	100	24	58	32
	881506	CT42	116	27	66	35
	881507	CT54	138	34	77	42
	881508	CT76	230	62	109	56
	881509	CT89	260	70	124	63.5
	881510	CT108	310	80	148	73

90° Female Thread	Product Code	Size	L	L1	Z	Z1	S
	881601	CDRP15×1/2"	51	28.4	31	11.6	24
	881602	CDRP18×1/2"	52	28.9	32	13.1	24
	881603	CDRP22×1/2"	53	26.15	32	15.85	24
	881604	CDRP22×3/4"	56	31.15	35	15.85	30
	881605	CDRP22×1"	60	44.15	39	15.85	38
	881606	CDRP28×1"	64	45.35	41	18.65	38

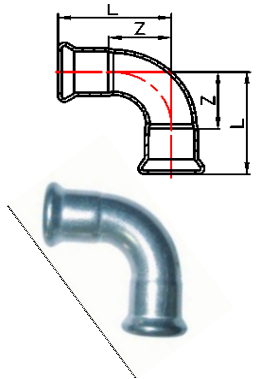
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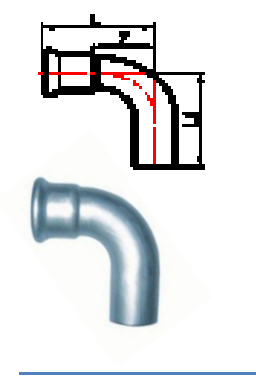
Tee with Female Thread Branch	Product Code	Size	L	L1	Z	Z1	S
	881701	CTRP15×1/2"	64	43.5	12	28.3	24
	881702	CTRP18×1/2"	68	44	14	38.75	24
	881703	CTRP22×1/2"	74	46	16	31.25	24
	881704	CTRP22×3/4"	74	48.5	16	31.95	30
	881705	CTRP28×1/2"	84	51	19	31.65	24
	881706	CTRP28×3/4"	84	53	19	36.45	30
	881707	CTRP28×1"	84	56	19	36.65	38
	881708	CTRP35×1/2"	100	54	24	38.25	24
	881709	CTRP35×3/4"	100	60	24	38.35	46
	881710	CTRP42×1"	116	63	27	41.75	55
	881711	CTRP54×1/2"	138	63	34	47.75	24
	881712	CTRP54×2"	138	74	34	48.05	65

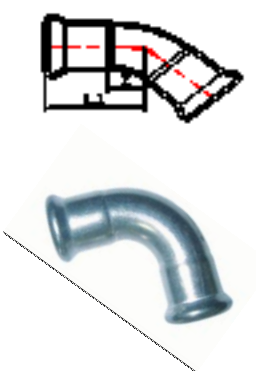
Tee with Male Thread Branch	Product Code	Size	L	L1	Z	Z1	S
	881801	CTR15×1/2"	64	41	12	27.5	22
	881803	CTR22×1/2"	74	44	16	30.5	24
	881804	CTR22×3/4"	74	45	16	30.5	28
	881805	CTR28×1/2"	84	48	19	35	22
	881806	CTR28×3/4"	84	50	19	35	28
	881807	CTR28×1"	84	53	19	36	36
	881810	CTR42×1 1/2"	116	63	27	44	50
	881811	CTR54×1/2"	138	62	34	56	22
	881812	CTR54×2"	138	76	34	51.5	60

Stop End	Product Code	Size	L	Z
	881901	CD15	35	15
	881902	CD18	36	16
	881903	CD22	37	16
	881904	CD28	41	18
	881905	CD35	45	19
	881906	CD42	50	19
	881907	CD54	56	21
	881908	CD76	74	21
	881909	CD89	82	22
	881910	CD108	97	22

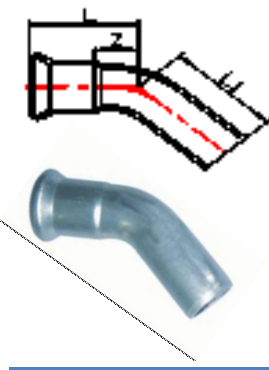
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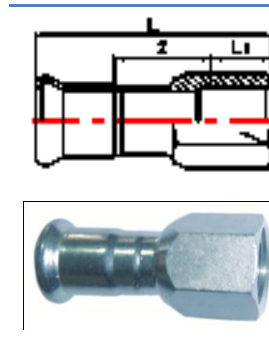
90' Bend	Product Code	Size	L	Z
	882101	CW15	39	19
	882102	CW18	45	25
	882103	CW22	48	27
	882104	CW28	57	34
	882105	CW35	69	43
	882106	CW42	87	56
	882107	CW54	107	72
	882108	CW76	150	97
	882109	CW89	173	113
	882110	CW108	214	139

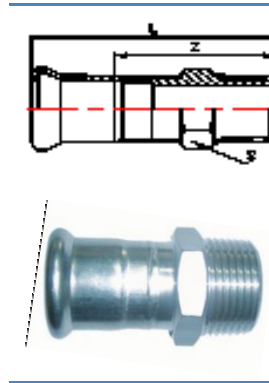
90' Street Bend	Product Code	Size	L	L1	Z
	882201	CWC15	39	45	19
	882202	CWC18	45	51	25
	882203	CWC22	48	54	27
	882204	CWC28	57	63	34
	882205	CWC35	69	75	43
	882206	CWC42	87	93	56
	882207	CWC54	107	113	72
	882208	CWC76	150	167	97
	882209	CWC89	173	188	113
	882210	CWC108	214	235	139

45' Obtuse Elbow 45°	Product Code	Size	L	Z
	882301	CWV15	31	11
	882302	CWV18	32	12
	882303	CWV22	35	14
	882304	CWV28	40	17
	882305	CWV35	46.5	20.5
	882306	CWV42	56	25
	882307	CWV54	67	32
	882308	CWV76	94	41
	882309	CWV89	106	46
	882310	CWV108	138	63

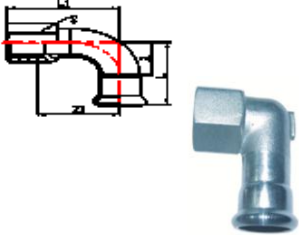
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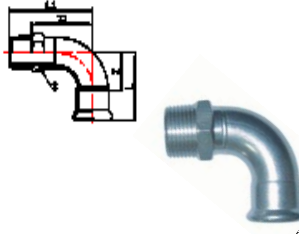
45° Obtuse Street Elbow	Product Code	Size	L	L1	Z
	882401	CWCV15	32.5	38	12.5
	882402	CWCV18	33.5	38	13.5
	882403	CWCV22	36.5	42	15.5
	882404	CWCV28	41.5	46	18.5
	882405	CWCV35	46.5	52	20.5
	882406	CWCV42	56	63	25
	882407	CWCV54	67	73	32
	882408	CWCV76	94	115	41
	882409	CWCV89	106	125	46
	882410	CWCV108	138	159	63

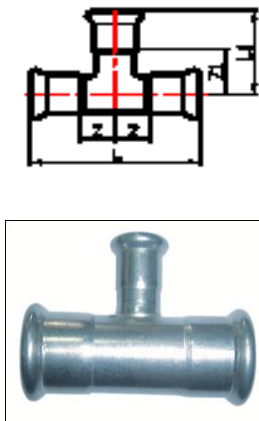
Female Straight Connector	Product Code	Size	L	L1	Z	S
	882501	CSRP15×1/2"	59	15.25	23.75	24
	882502	CSRP15×3/4"	61	16.55	24.75	30
	882503	CSRP18×1/2"	60	15.25	24.75	24
	882504	CSRP18×3/4"	62	16.55	25.45	30
	882505	CSRP22×1/2"	61	15.25	24.75	24
	882506	CSRP28×1"	69	19.35	24.65	38
	882507	CSRP35×1 1/4"	72	21.65	24.35	46
	882508	CSRP42×1 1/2"	74	21.25	24.75	55
	882509	CSRP54×2"	88	25.95	26.05	65

Male Straight Connector	Product Code	Size	L	Z	S
	882601	CSR15×1/2"	59	39	22
	882602	CSR15×3/4"	61	41	28
	882603	CSR18×1/2"	60	40	22
	882604	CSR18×3/4"	62	42	28
	882605	CSR22×1/2"	61	40	22
	882606	CSR22×3/4"	62	41	28
	882607	CSR28×1"	69	46	36
	882608	CSR35×1 1/4"	72	46	43
	882609	CSR42×1 1/2"	74	43	50
	882610	CSR54×2"	88	53	60

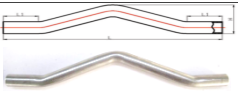
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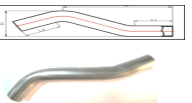
90' Bend with Female	Product Code	Size	L	L1	Z	Z1	S
	882701	CWRP15×1/2"	39	52	19	34.75	24
	882702	CWRP18×1/2"	45	56	25	40.75	24
	882703	CWRP22×3/4"	48	61	27	43.45	30
	882704	CWRP28×1"	57	69	34	46	38
	882705	CWRP35×1"	69	79	43	57.35	46
	882706	CWRP42×1"	87	93	56	71.75	55
	882707	CWRP54×2"	107	113	72	87.05	65

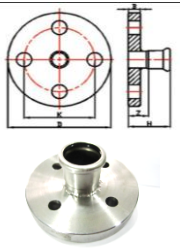
90' Bend with Male Thread	Product Code	Size	L	L1	Z	Z1	S
	882801	CWR15×1/2"	39	51	19	32	22
	882802	CWR18×1/2"	45	55	25	40	22
	882803	CWR22×3/4"	48	60.5	27	42	28
	882804	CWR28×1"	57	69	34	50	36
	882805	CWR35×1 1/4"	69	79	43	60	43
	882806	CWR42×1 1/2"	87	93	56	74	50
	882807	CWR54×2"	107	115	72	90.5	60

Reduced Tee Branch	Product Code	Size	L	Z	L1	Z1
	882901	CTE18×15	68	14	43	23
	882902	CTE22×15	74	16	45	25
	882903	CTE22×18	74	16	46	26
	882904	CTE28×15	84	19	48	28
	882905	CTE28×18	84	19	49	29
	882906	CTE28×22	84	19	50	29
	882907	CTE35×15	100	24	50	30
	882908	CTE35×18	100	24	51	31
	882909	CTE35×22	100	24	53	32
	882910	CTE35×28	100	24	55	32
	882911	CTE42×22	116	27	56	35
	882912	CTE42×35	116	27	61	35
	882913	CTE54×22	138	34	62	41
	882914	CTE54×28	138	34	64	41
	882915	CTE54×35	138	34	67	41
	882916	CTE54×42	138	34	71	40

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Long pipe bridge	Product Code	Size	L	L1	H
	883001	CZG15	234	37	44
	883002	CZG22	256	41	53
	883003	CZG28	284	48	64

Short pipe bridge	Product Code	Size	L	L1	H
	883101	CDG15	97	31	44
	883102	CDG22	118	43	53
	883103	CDG28	144	54	64

Flange	Product Code	Size	Z	D	H	K	B	Holes
	883201	CF15	18.5	95	38.5	65	11	4
	883202	CF18	19.5	95	39.5	65	11	4
	883203	CF22	20.5	105	41.5	75	12	4
	883204	CF28	24.5	115	47.5	85	14	4
	883205	CF35	23.5	140	49.5	100	15	4
	883206	CF42	24.5	150	55.5	110	16	4
	883207	CF54	28.5	165	63.5	125	18	4