

TECHNICAL MANUAL

ELYSEE SADDLE



Can be used secondary line derivation from main lines of PE, PVC, or PP for irrigation, high pressure conveyance of water, chemical solutions and slurries.

Clamping part from 20mm up to 200mm diameter and threaded part from ½" up to 4" diameter.

The high grade polypropylene material used ensures long lasting operation under demanding applications.

Excellent resistance to most commonly used chemicals for such kind of applications.

Suitable for use in potable water supply systems.

Suitable for exposure to sunlight (UV).

Nitrile sealing gasket for excellent sealing performance and chemical resistance.

QUALITY MANAGEMENT

Our Quality management system ensures top-class products in terms of performance, reliability and durability. This is a crucial parameter to ensure customer satisfaction and loyalty. Elysee quality system, ISO 9001:2008, is approved by CCC and IQNet. Saddle fittings have been tested and approved based on EN ISO 14360 & AS/ NZS 4129 standard where all dimensional, physical, mechanical, performance and system performance requirements are fully satisfied.

DIMENSIONS AND CHARACTERISTICS

Saddle fittings comply with the dimensional requirements and characteristics of the relevant standards EN ISO 14360 & AS/ NZS 4129. Threads (BSP) are manufactured according to EN 10226, ISO 7, DIN 2999 and BS 21.

OPERATING PRESSURE

16 bar @ 20°C for \varnothing 20 mm up to \varnothing 110 mm.
(Exceptions: 12.5 bar for threads 1 ¼" and above)
6 bar @ 20°C for \varnothing 125 mm up to \varnothing 200 mm

FLUIDS OTHER THAN WATER

Chemicals can affect the strength, flexibility, surface appearance, colour, dimensions or weight of fittings. The saddles may convey a wide variety of fluids due to their high chemical resistance.

Note: Contact us for advice on specific applications.

ABRASION RESISTANCE

The saddles are suitable for the transportation of abrasive slurries and will withstand normal conditions found in urban, mining, industrial, rural water and waste water systems.

OPERATING TEMPERATURE

The saddles are able to withstand temperatures up to 40°C limited by the pipe's material thermal resistance properties.

RESISTANCE TO IMPACT

The thermoplastic materials used for manufacturing the fittings have excellent impact properties.

ELECTROLYTIC CORROSION

Saddle fittings are non-magnetizing and do not cause electrolytic deterioration.

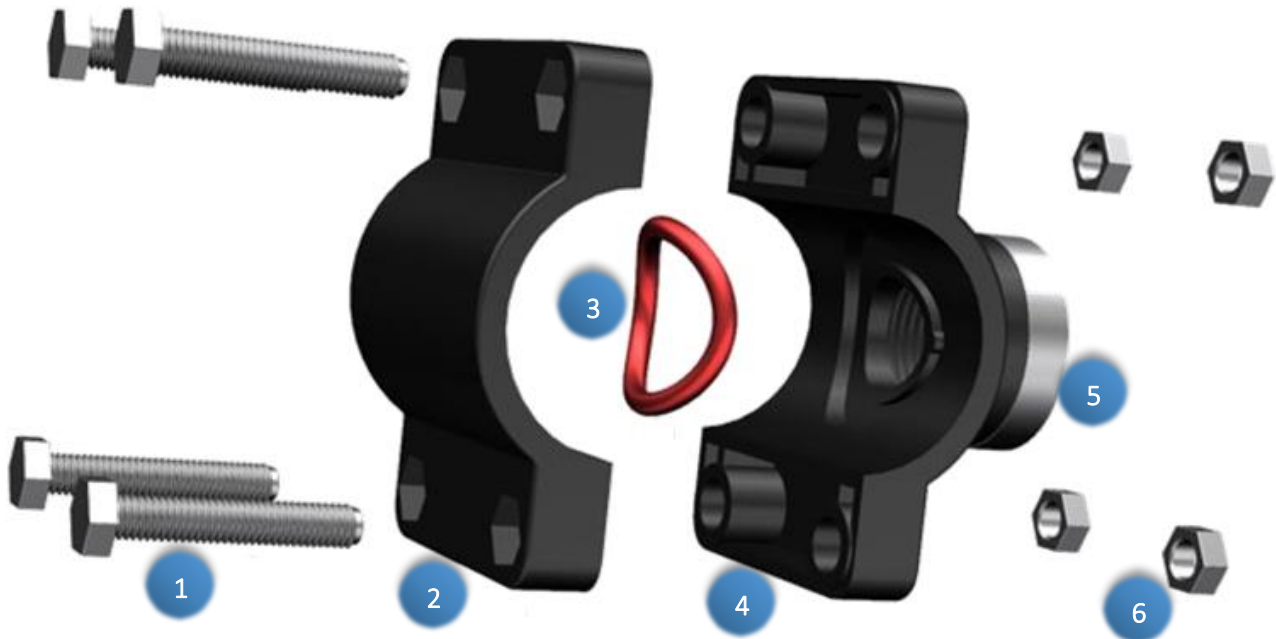
WEATHERING

Saddle fittings offer excellent weathering properties which protects against degradation due to ultraviolet radiation. Therefore, their use is permissible.

TESTING OF FITTINGS

- Resistance to internal hydrostatic pressure
- Resistance to long-term internal hydrostatic pressure
- Resistance to internal under-pressure
- Resistance to pressure during application of a bending moment to the branch outlet
- Resistance to rotational sliding
- Resistance to axial sliding

MATERIALS AND COMPONENTS



(1) BOLTS – Constitute a fundamental part of the saddle in order to enhance restraint performance. The bolts meet the standard of ISO4018 & DIN933

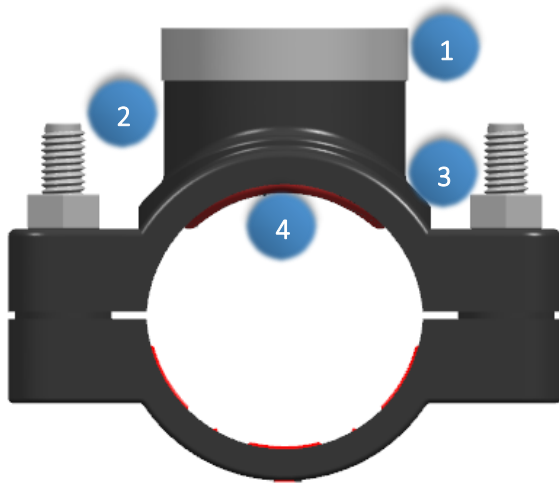
(2) & (4) BODY – Major and most important component of the fitting system. It can be shaped in several dimensions and configurations to satisfy the requirements and arrangements of fluids direction. It has a snagging arrangement internally to position the O-ring and insert, ensuring leak tightness when assembled with a pipe. A male trapezoidal thread is used externally to join the body with the nut. The body is made with black high performance polypropylene copolymer PP-B.

(3) O-RING – Ensures leak tightness between the fitting system and the inserted pipe. It is made by food safe nitrile rubber (NBR 70) to withstand high service temperature, excellent compression set, tear, and abrasion resistance.

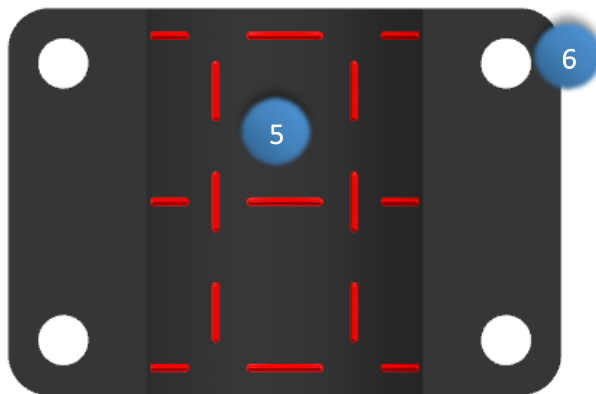
(5) REINFORCING RING – Stainless steel made ring, suitable for female threaded type compression fittings and saddles. Enable high strength and pressure resistance especially on high diameters and threads where the above factors are particularly critical.

(6) METAL HEX NUTS – Stainless or galvanized steel made, available on several diameters and thickness for the optimum fit on each size of saddle.

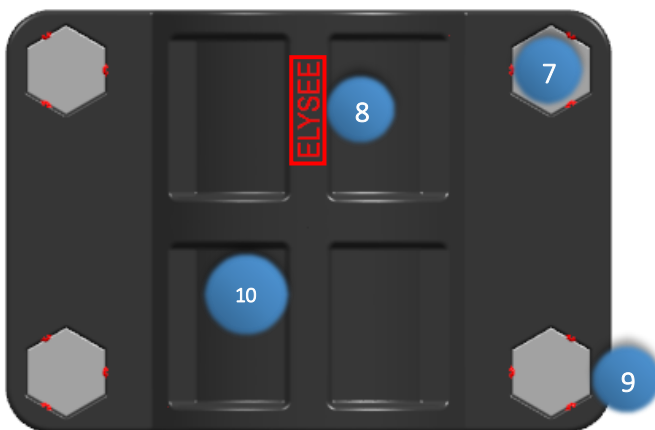
MAIN FEATURES



1. Stainless steel reinforcement ring that provides extra hold to the BSP thread branch.
2. BSP threaded outlet – various sizes from ½" up to 4" according to pipe diameter.
3. Reinforcing rib on the threaded outlet, resisting to long term stress.
4. High quality nitrile gasket with option in shapes, such as O-Ring or Flat.

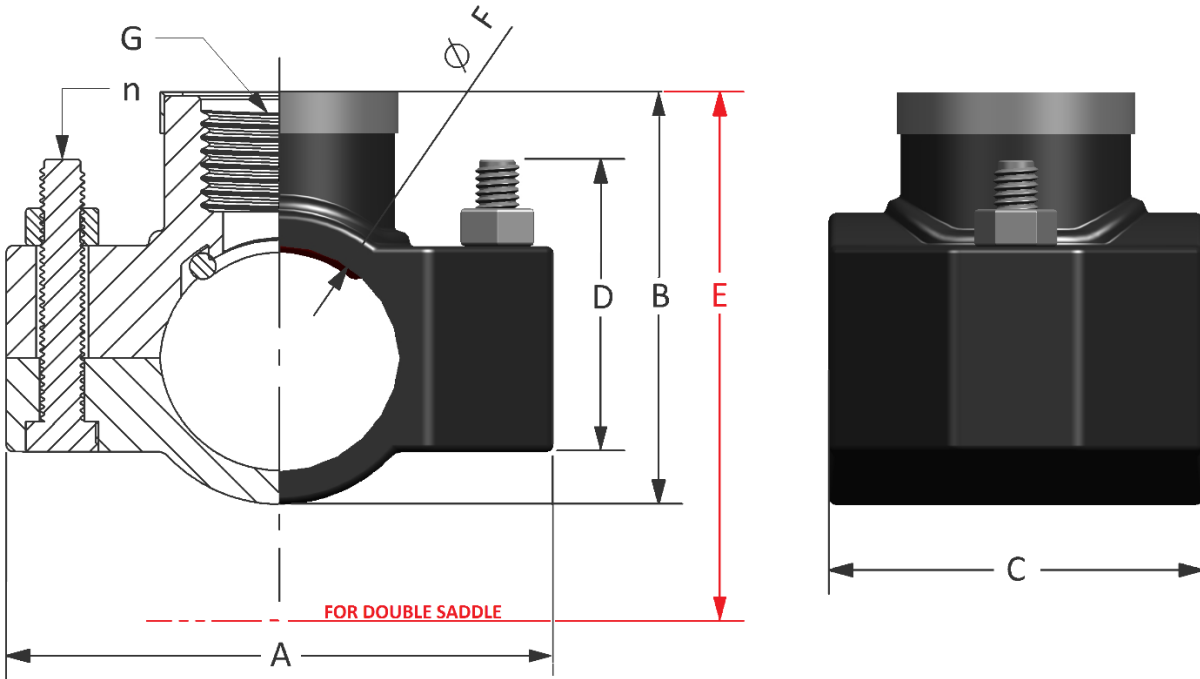


5. Axial and radial teeth to prevent rotational and axial sliding on the pipe.
6. Bolt holes guides on upper and lower parts to align bolts during assembly.

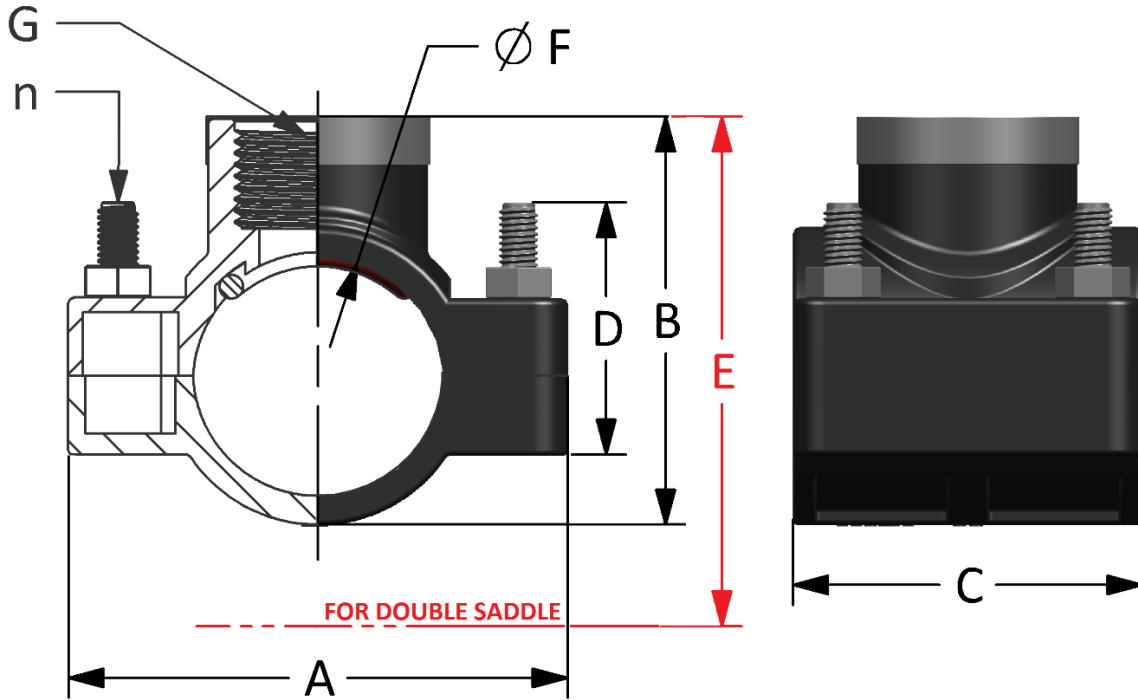


7. Innovative grips to enhance bolts restrain and to facilitate easy assembly.
8. Interchangeable label indicating manufacturer's name and/or the customer's trademark.
9. Hexagonal grooves to prevent bolt from turning during tightening nut.
10. Axial and radial protrusion ribs for additional strength and pressure performance.

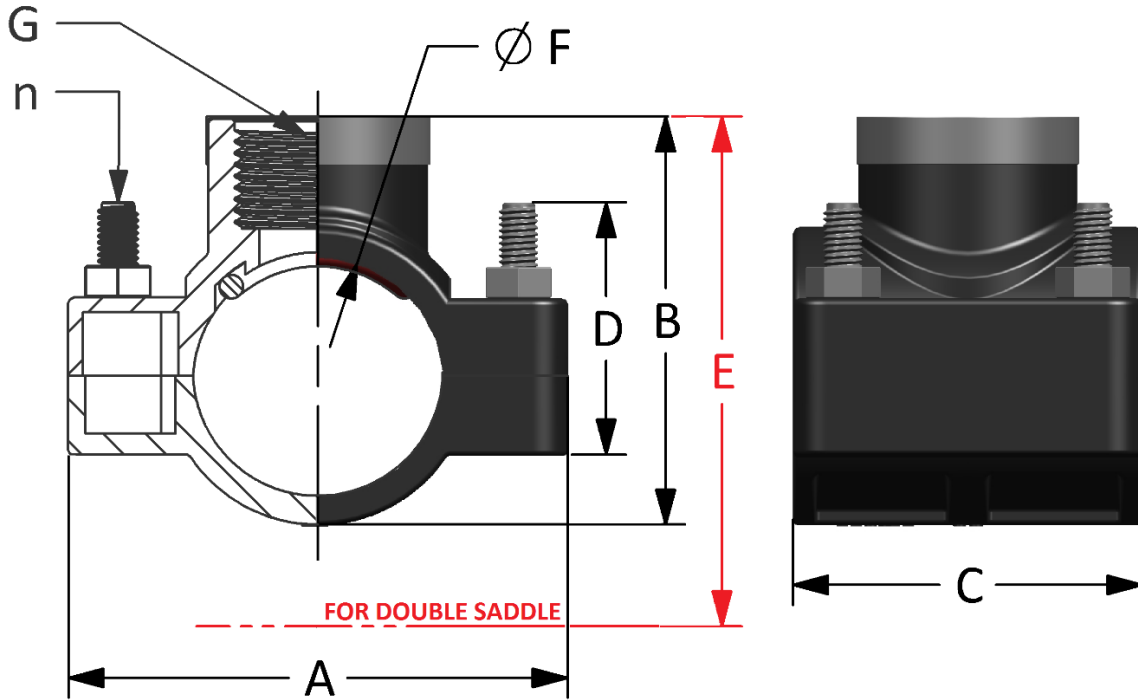
NOMINAL DIMENSIONS



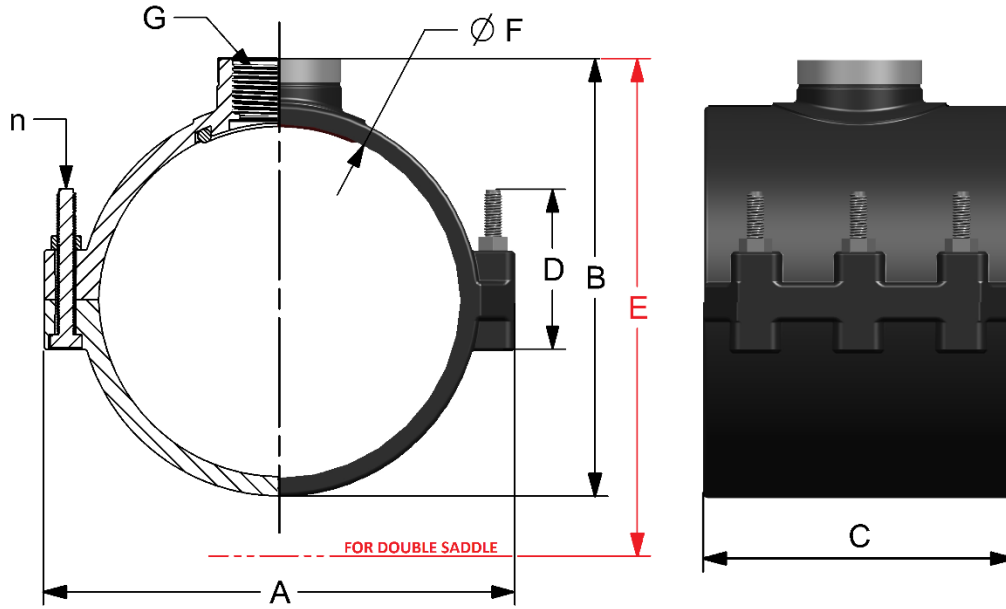
CODE	SIZE	NUTS & BOLTS	WEIGHT (GR)	NOMINAL DIMENSIONS							
				A	B	C	D	E	F	G	n
550 0020 01	20X1/2"	M6 - M6X30	51.5	62	48.5	37	25.5	65	20	1/2"	2
550 0025 01	25X1/2"	M6 - M6X35	66.7	48	48	49.5	31	62	25	1/2"	2
550 0025 02	25X3/4"	M6 - M6X35	69.7	48	50	49.5	31	67	25	3/4"	2
550 0032 01	32X1/2"	M6 - M6X40	71.1	73	57	49.5	36	71	32	1/2"	2
550 0032 02	32X3/4"	M6 - M6X40	74.1	73	59.5	49.5	36	76	32	3/4"	2
550 0032 03	32X1"	M6 - M6X40	76	73	62	49.5	36	81	32	1"	2
550 0040 01	40X1/2"	M8 - M8X40	104.7	92	71.5	61	34	88.5	40	1/2"	2
550 0040 02	40X3/4"	M8 - M8X40	107.7	92	73.5	61	34	92.5	40	3/4"	2
550 0040 03	40X1"	M8 - M8X40	111.9	92	75.5	61	34	96	40	1"	2
550 0050 01	50X1/2"	M8 - M8X45	133.7	98	76	60	39	90	50	1/2"	2
550 0050 02	50X3/4"	M8 - M8X45	133.8	98	80	60	39	98	50	3/4"	2
550 0050 03	50X1"	M8 - M8X45	142.7	98	83	60	39	104.5	50	1"	2
550 0063 01	63X1/2"	M8 - M8X45	151.7	111	90	60	39	102.5	63	1/2"	2
550 0063 02	63X3/4"	M8 - M8X45	153.7	111	92.5	60	39	108	63	3/4"	2
550 0063 03	63X1"	M8 - M8X45	160.7	111	97	60	39	116.5	63	1"	2



CODE	SIZE	NUTS & BOLTS	WEIGHT (GR)	NOMINAL DIMENSIONS							
				A	B	C	D	E	F	G	n
550 0450 01	50X1/2"	M8 - M8X45	180.9	95	76	66	39	90.5	50	1/2"	4
550 0450 02	50X3/4"	M8 - M8X45	210	95	79.5	66	39	97	50	3/4"	4
550 0450 03	50X1"	M8 - M8X45	190	95	83	66	39	104	50	1"	4
550 0450 04	50X1 1/4"	M8 - M8X45	199.2	95	86	66	39	110	50	1 1/4"	4
550 0463 01	63X1/2"	M8 - M8X45	187.9	111	89.5	60	39	102.5	63	1/2"	4
550 0463 02	63X3/4"	M8 - M8X45	191.1	111	93	60	39	109	63	3/4"	4
550 0463 03	63X1"	M8 - M8X45	196.9	111	97	60	39	117.5	63	1"	4
550 0463 04	63X1 1/4"	M8 - M8X45	235.3	111	101	77	39	125	63	1 1/4"	4
550 0463 05	63X1 1/2"	M8 - M8X45	318.9	111	101	77	39	124	63	1 1/2"	4
550 0075 01	75X1/2"	M8 - M8X50	256	122.5	103	72	44	117	75	1/2"	4
550 0075 02	75X3/4"	M8 - M8X50	237.6	122.5	106	72	44	123.5	75	3/4"	4
550 0075 03	75X1"	M8 - M8X50	242.6	122.5	109	72	44	129	75	1"	4
550 0075 04	75X1 1/4"	M8 - M8X50	278.5	121.5	111	84	44	133	75	1 1/4"	4
550 0075 05	75X1 1/2"	M8 - M8X50	286.5	121.5	112	84	44	135	75	1 1/2"	4
550 0075 06	75X2"	M8 - M8X50	435.9	122.5	122	97	44	155.5	75	2"	4
550 0090 03	90X1"	M8 - M8X60	436.1	143.5	129	104	54	151.5	90	1"	4
550 0090 04	90X1 1/4"	M8 - M8X60	453.4	143.5	133	104	54	159.5	90	1 1/4"	4
550 0090 05	90X1 1/2"	M8 - M8X60	446.9	143.5	135	104	54	163	90	1 1/2"	4

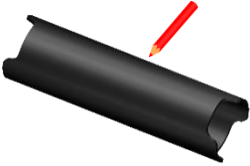
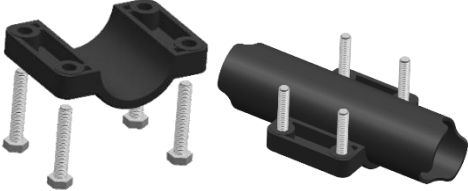




CODE	SIZE	NUTS & BOLTS	WEIGHT (GR)	NOMINAL DIMENSIONS							
				A	B	C	D	E	F	G	n
550 0090 06	90X2"	M8 - M8X60	491.4	143.5	140	103	54	173	90	2"	4
550 0110 01	110X1/2"	M8 - M8X65	544.4	167	147	115	59	165	110	1/2"	4
550 0110 02	110X3/4"	M8 - M8X65	533	167	149	115	59	167	110	3/4"	4
550 0110 03	110X1"	M8 - M8X65	537.1	167	151	115	59	173.5	110	1"	4
550 0110 04	110X1 1/4"	M8 - M8X65	549.4	167	156	116	59	183	110	1 1/4"	4
550 0110 05	110X1 1/2"	M8 - M8X65	569.4	167	157	116	59	186	110	1 1/2"	4
550 0110 06	110X2"	M8 - M8X65	588.4	167	160	115	59	191.5	110	2"	4
550 0125 02	125X3/4"	M8 - M8X65	526.4	172	167	101	57	193.5	125	3/4"	4
550 0125 03	125X1"	M8 - M8X65	533.1	172	167	101	57	192	125	1"	4
550 0125 04	125X1 1/4"	M8 - M8X65	540.4	172	167	101	57	190.5	125	1 1/4"	4
550 0125 05	125X1 1/2"	M8 - M8X65	526.4	172	167	101	57	194	125	1 1/2"	4
550 0125 06	125X2"	M8 - M8X65	534.4	172	172.5	101	57	204	125	2"	4




CODE	SIZE	NUTS & BOLTS	WEIGHT (GR)	NOMINAL DIMENSIONS							
				A	B	C	D	E	F	G	n
550B 125 08	125X3"	M8 - M8X65	913.4	174	184	136	56	215.5	125	3"	6
550 0140 02	140X3/4"	M8 - M8X65	825.2	190	185	132	56	206	140	3/4"	6
550 0140 03	140X1"	M8 - M8X65	836.2	190	184	131	56	203.5	140	1"	6
550 0140 04	140X1 1/4"	M8 - M8X65	845.6	190	185	132	56	207	140	1 1/4"	6
550 0140 05	140X1 1/2"	M8 - M8X65	843.6	190	185	132	56	206	140	1 1/2"	6
550 0140 06	140X2"	M8 - M8X65	720.3	190	196	131	56	228	140	2"	6
550 0140 07	140X2 1/2"	M8 - M8X65	890.4	190	192	132	56	219.5	140	2 1/2"	6
550 0160 02	160X3/4"	M8 - M8X65	799.6	208	192	137	59	207	160	3/4"	6
550 0160 03	160X1"	M8 - M8X65	788.6	208	192	137	59	208.5	160	1"	6
550 0160 04	160X1 1/4"	M8 - M8X65	783.6	208	193	136	59	208.5	160	1 1/4"	6
550 0160 05	160X1 1/2"	M8 - M8X65	797.6	208	196	137	59	216.5	160	1 1/2"	6
550 0160 06	160X2"	M8 - M8X65	676.7	208	204	137	59	233.5	160	2"	6
550B 160 08	160X3"	M8 - M8X65	1222.4	213	215	153	59	255.5	160	3"	6
550B 160 09	160X4"	M10 - M8X65	1264	213	215	153	59	255.5	160	4"	6
550 0200 02	200X3/4"	M10 - M10X80	1692	270.5	257	173	70	275.5	200	3/4"	6
550 0200 03	200X1"	M10 - M10X80	1690	270.5	257	174	70	275	200	1"	6
550 0200 04	200X1 1/4"	M10 - M10X80	1709	270.5	255	174	70	271	200	1 1/4"	6
550 0200 06	200X2"	M10 - M10X80	1706	270.5	268	173	70	298	200	2"	6
550B 200 08	200X3"	M10 - M10X80	1692	270.5	268	172	70	298	200	3"	6
550B 200 09	200X4"	M10 - M10X80	1768.4	270.5	268	172	70	298	200	4"	6

ASSEMBLY PROCEDURE

	PROCEDURE	INSTRUCTIONS
STEP 1		<ol style="list-style-type: none"> 1. Clean the pipe surface from any dirt. 2. Mark the hole center
STEP 2		<ol style="list-style-type: none"> 3. Place the bolts in the lower saddle body 4. Place the pipe over it.
STEP 3		<ol style="list-style-type: none"> 5. Place the upper body of the saddle over the pipe 6. Align upper saddle guide holes with the bolts and marking hole 7. Place the nuts and tighten with a wrench. <p>Recommendation: Grease the bolts and nuts to prevent any chance of oxidation.</p>
STEP 4		<ol style="list-style-type: none"> 8. Drill suitable sized hole through orifice of saddle with boring tool. <p>Note: Take care to not damage threads or gasket.</p> <p>Recommendation: Use PTFE tape on BSP threads to ensure positive seal.</p>

DISASSEMBLY PROCEDURE

	PROCEDURE	INSTRUCTIONS
STEP 1		<ol style="list-style-type: none"> 1. Loosen and detach all bolts around saddle