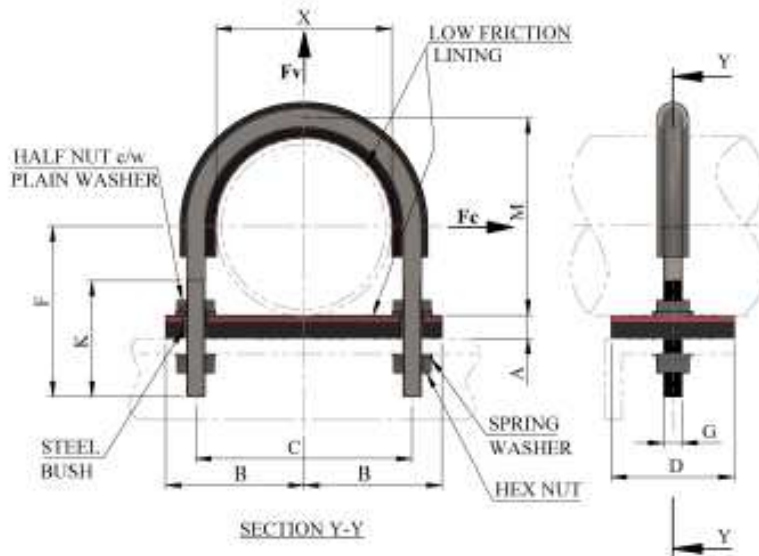


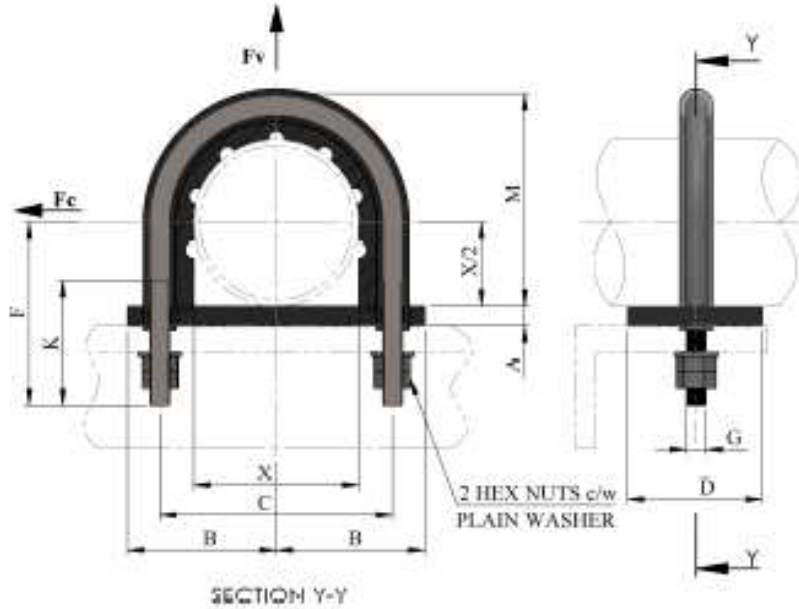
9	U- BOLT		
9.1	T-PC-010 U- BOLT FOR CS , SS & ALLOY LINES DN 15 – DN 200 mm / ½” – 8” (NON- GRIP)	9.2	T-PC-011 U- BOLT FOR CS , SS & ALLOY LINES DN 15 – DN 200 mm / ½” – 8” (GRIP)
			
9.3	T-PC-012 U- BOLT FOR CS , SS & ALLOY LINES DN 15 – DN 40 mm / ½” – 1 1/2” (NON- GRIP)	9.4	T-PC-013 U- BOLT FOR CS , SS & ALLOY LINES DN 15 – DN 40 mm / ½” – 1 1/2” (GRIP)
			

**9.1 U- BOLT FOR CS , SS & ALLOY LINES
DN 15 – DN 200 mm / ½” – 8” (NON- GRIP)**
PC-010


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T- PC-010-(DN)-SS	SS	150 °C	(-) 46 °C
T- PC-010-(DN)-CS (SEE NOTES)	CS	150 °C	(-) 46 °C

TYPE	LINE SIZE			U-BOLT DIMENSIONS									MAX. LOADS (kN)			
													Stainless steel		Carbon Steel	
	DN (mm)	NPS in (inch)	NPS in (mm)	A	B	C	D	F	G	K	M	X	Fv	Fc	Fv	Fc
T-PC-010-0015	DN 15	1/2"	21.3	6	30	37	25	60	6	57	29	21				
T-PC-010-0020	DN 20	3/4"	26.7	6	34	43	25	65	6	60	35	27				
T-PC-010-0025	DN 25	1"	33.4	6	36	50	25	65	6	60	42	34				
T-PC-010-0030	DN 30	1 1/4"	42.2	6	49	64	25	80	10	70	53	43				
T-PC-010-0040	DN 40	1 1/2"	48.3	6	53	75	30	80	10	70	62	49				
T-PC-010-0050	DN 50	2"	60.3	6	59	87	30	90	10	75	74	61				
T-PC-010-0080	DN 80	3"	88.9	6	77	115	40	100	12	75	102	89				
T-PC-010-0100	DN 100	4"	114.3	6	90	141	40	110	12	75	128	115				
T-PC-010-0150	DN 150	6"	168.3	6	129	210	50	180	16	120	189	168				
T-PC-010-0200	DN 200	8"	219.1	6	156	262	50	199	16	120	240	219				

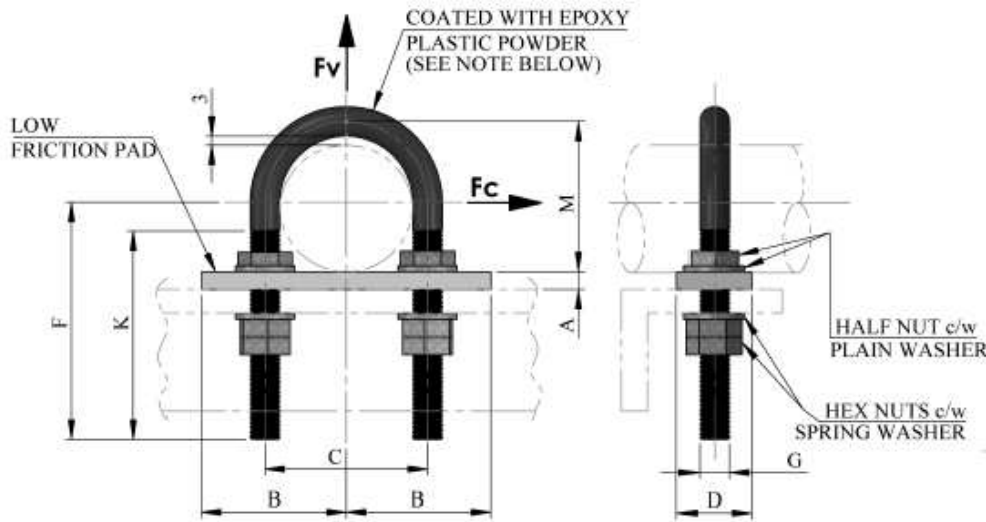
*Carbon Steel PC-010 is only available in size 3" and above.
 Isolating pad materials / coating from manufacturers shall be subject to project approval.
 Max. loads in kN "Fv" and "Fc" are non-concurrent loads.
 Bolt hole dia = Bolt dia (G) + 2mm
 Dims B & C are subject to the chosen project vendor supply/ variation . They are noted here for guidance only.

**9.2 U- BOLT FOR CS , SS & ALLOY LINES
DN 15 – DN 200 mm / ½” – 8” (GRIP)**
PC-011


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-PC-011-(DN)-SS	SS	150 °C	(-) 46 °C
T-PC-011-(DN)-CS (SEE NOTES)	CS	150 °C	(-) 46 °C

TYPE	LINE SIZE			U-BOLT DIMENSIONS									MAX. LOADS (kN)			
	DN (mm)	NPS in (inch)	NPS in (mm)	A	B	C	D	F	G	K	M	X	Stainless steel		Carbon Steel	
													Fv	Fc	Fv	Fc
T-PC-011-0015	DN 15	1/2"	21.3	6	30	37	25	60	6	57	29	21				
T-PC-011-0020	DN 20	3/4"	26.7	6	34	43	25	65	6	60	35	27				
T-PC-011-0025	DN 25	1"	33.4	6	36	50	25	65	6	60	42	34				
T-PC-011-0030	DN 30	1 1/4"	42.2	6	49	64	25	80	10	70	53	43				
T-PC-011-0040	DN 40	1 1/2"	48.3	6	49	75	25	80	10	70	62	49				
T-PC-011-0050	DN 50	2"	60.3	6	55	87	25	90	10	75	74	61				
T-PC-011-0080	DN 80	3"	88.9	6	70	115	25	100	12	75	102	89				
T-PC-011-0100	DN 100	4"	114.3	6	83	141	25	110	12	75	128	115				
T-PC-011-0150	DN 150	6"	168.3	6	123	210	50	180	16	120	189	168				
T-PC-011-0200	DN 200	8"	219.1	6	150	262	50	199	16	120	240	219				

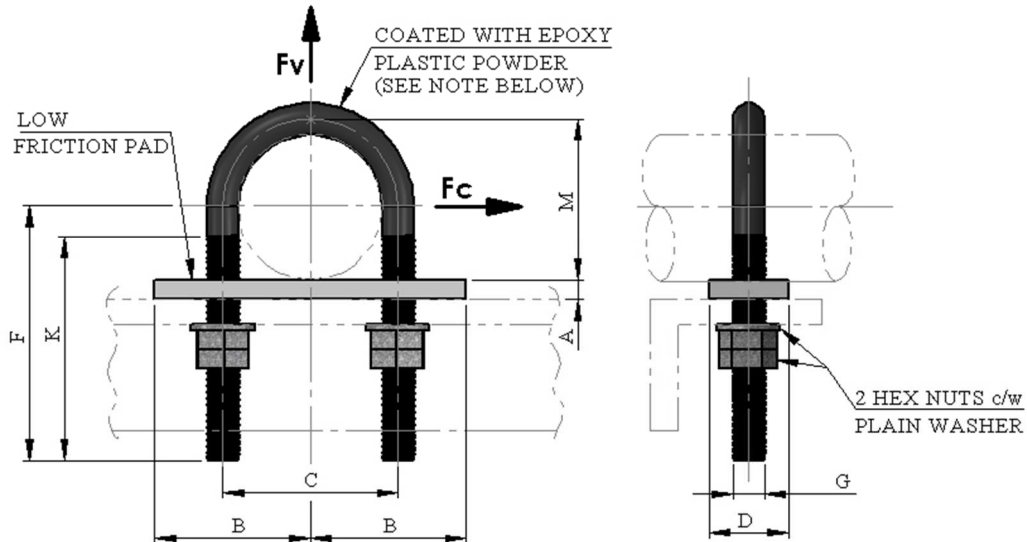
*Carbon Steel PC-011 is only available in size 3" and above.
 Isolating Pad Materials / Coating from manufacturers shall be subject to project approval.
 Max. loads in kN "Fv" and "Fc" are non-concurrent loads.
 Bolt hole dia = Bolt dia (G) + 2mm.
 Dims B & C are subject to the chosen Project vendor supply / variation . They are noted here for guidance only.

9.3 U- BOLT FOR CS , SS & ALLOY LINES
DN 15 – DN 40 mm / ½” – 1 ½” (NON- GRIP)
PC-012


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-PC-012-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			U-BOLT DIMENSION								MAX. LOADS (kN)			
	DN (mm)	NPS in (inch)	NPS in (mm)	A	B	C	D	F	G	K	M	SS		CS	
												Fv	Fc	Fv	Fc
T-PC-012-0015	DN 15	1/2"	21.3	6	30	32	25	60	6	57	27	1.2	0.4		
T-PC-012-0020	DN 20	3/4"	26.7	6	34	37	25	65	6	60	33	1.2	0.3		
T-PC-012-0025	DN 25	1"	33.4	6	36	44	25	65	6	60	39	1.2	0.3		
T-PC-012-0030	DN 30	1 1/4"	42.2	6	44	54	25	80	10	70	51	3.2	0.5		
T-PC-012-0040	DN 40	1 1/2"	48.3	6	49	63	25	80	10	70	56	3.2	0.5		

Isolating pad materials / coating from manufacturers shall be subject to project approval.
 Max. loads in kN "Fv" and "Fc" are non-concurrent loads.
 U-Bolt to be coated with epoxy plastic powder with minimum 300 µ thickness.
 Bolt hole dia = Bolt dia (G) + 2mm.
 Dims B & C are subject to the chosen project vendor supply/ variation . They are noted here for guidance only.

9.4 U-BOLT FOR CS, SS & ALLOY LINES
DN 15 – DN 40 mm / 1/2" – 1 1/2" (GRIP)
PC-013


TYPICAL PART NUMBER	AVAILABLE MATERIAL SHORT CODE	STD DETAIL TEMPERATURE LIMITATION	
		MAX. DESIGN TEMP	MIN. DESIGN TEMP
T-PC-013-(DN)-SS	SS	150 °C	(-) 46 °C

TYPE	LINE SIZE			U- BOLT DIMENSIONS								MAX. LOADS (kN)			
	DN (mm)	NPS in (inch)	NPS in (mm)	A	B	C	D	F	G	K	M	SS		CS	
												Fv	Fc	Fv	Fc
T-PC-013-0015	DN 15	1/2"	21.3	6	30	32	25	60	6	57	24	1.2	0.4		
T-PC-013-0020	DN 20	3/4"	26.7	6	34	37	25	65	6	60	30	1.2	0.3		
T-PC-013-0025	DN 25	1"	33.4	6	36	44	25	65	6	60	36	1.2	0.3		
T-PC-013-0030	DN 30	1 1/4"	42.2	6	44	54	25	80	10	70	48	3.2	0.5		
T-PC-013-0040	DN 40	1 1/2"	48.3	6	49	63	25	80	10	70	53	3.2	0.5		

Isolating pad materials / Coating from manufacturers shall be subject to project approval.
 Max. loads in kN "Fv" and "Fc" are non-concurrent loads.
 U-Bolt to be coated with epoxy plastic powder with minimum 300 µ thickness.
 Bolt hole dia = Bolt dia (G) + 2mm.
 Dims B & C are subject to the chosen project vendor supply/ variation . They are noted here for guidance only.