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INTRODUCTION

1.1 INTRODUCTION:

SUREPRESS offer a fully German engineered Stainless-Steel press-fit connection solution. With 2 profile options and a range of key features and benefits. Surepress is a quality system offering complete peace of mind along with a design life of over 50 years*. Combine this with 25 years of market experience, SUREPRESS is your complete stainless solution for potable water, fuel, gas, compressed air and various other suitable applications*.

Fast Safe & Easy to use

- · Heat Free, Flame Free Joints
- · No hot works permit required
- · Speed of installation
- Faster than traditional methods
- · No need to drain water from the system
- · No post treatment required

Reliable

- Consistent uniform joint, every time
- Leak path detection, if not pressed the joint will purposely leak
- Visual press indicators to identify non-pressed joints.

Quality 316L Stainless Steel Tube

- Low Carbon (0.013%) plus 2.3 % Molybdenum content for higher corrosion resistance.
- 316L material to EN 1.4404
- Range 15-168.3mm
- Compliant to AS 5200

Quality 316L Stainless Steel Press Fittings

- AS3688 compliant
- 316L material to EN 1.4404

Quality Tooling Options

- German Engineered with a lightweight ergonomic design
- 18V Li-ion battery
- Smart technology including real-time information via Bluetooth.
- Service intervals of up to 40,000 cycles

STANDARDS & APPROVALS















ÉFÍTÉSÜSTI MINÜSÉSSILLENÖRZŐ

304 & 316 STAINLESS STEEL TUBE

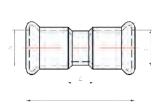


Code 316 Tube	Code 304 Tube	Dia (mm)	Nom.ID (mm)	Length (m)	Wall thickness (mm)	Weight Kg/M
TIDTS.015600	TI4TS.015600	15	13	6m	1.0	0.35
TIDTS.022600	TI4TS.022600	22	20	6m	1.2	0.6
TIDTS.028600	TI4TS.028600	28	25	6m	1.2	0.8
TIDTS.035600	TI4TS.035600	35	32	6m	1.5	1.25
TIDTS.042600	TI4TS.042600	42	39	6m	1.5	1.5
TIDTS.054600	TI4TS.054600	54	51	6m	1.5	2.0
TIDTS.076600	TI4TS.076600	76.1	72	6m	2.0	3.7
TIDTS.089600	TI4TS.089600	88.9	85	6m	2.0	4.35
TIDTS.108600	TI4TS.108600	108	104	6m	2.0	5.3
TIDTS.168600	TI4TS.168600	168.3	164	6m	2.0	8.328

M PROFILE FITTINGS

Coupling



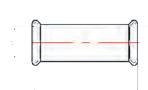


Technical specifications

SIZE	CODE	D	L	Z
15	MIPCO.000015	15	53	13
22	MIPCO.000022	22	53	13
28	MIPCO.000028	28	59	13
35	MIPCO.000035	35	65	13
42	MIPCO.000042	42	76	16
54	MIPCO.000054	54	86	17
76	MIPCO.000076	76.1	140	30
89	MIPCO.000089	88.9	164	38
108	MIPCO.0000108	108	195	43
168	MIPCO.000168	168.3	309	72

Slip Coupling



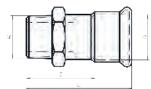


Technical specifications

SIZE	CODE	D	L
15	MIPCS.000015	15	80
22	MIPCS.000022	22	84
28	MIPCS.000028	28	91
35	MIPCS.000035	35	102
42	MIPCS.000042	42	120
54	MIPCS.000054	54	140
76	MIPCS.000076	76.1	230
89	MIPCS.000089	88.9	260
108	MIPCS.000108	108	310

Male Adaptor





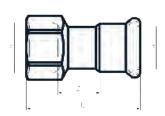
SIZE	CODE	D	L	Z	R
15 x ³ / ₈	MIPMA.015010	15	35	17	3/ ₈ in
$15 \times \frac{1}{2}$	MIPMA.015015	15	39	19	1/ ₂ in
15 x ³ / ₄	MIPMA.015020	15	40	20	3/ ₄ in
22 x ¹ / ₂	MIPMA.022015	22	44	23	1/ ₂ in
22 x ³ / ₄	MIPMA.022020	22	44	23	3/ ₄ in
22 x 1	MIPMA.022025	22	44	23	1 in
28 x ¹ / ₂	MIPMA.028015	28	N/A	N/A	1/ ₂ in
28 x ³ / ₄	MIPMA.028020	28	43	20	3/ ₄ in
28 x 1	MIPMA.028025	28	44	21	1 in
35 x 1	MIPMA.035025	35	49	24	1 in
35 x 1 ¹ / ₄	MIPMA.035032	35	55	29.5	1 ¹ / ₄ in
42 x 1 ¹ / ₄	MIPMA.042032	42	78	48	1 ¹ / ₄ in
42 x 1 ¹ / ₂	MIPMA.042040	42	78	48	1 ¹ / ₂ in
$54 \times 11/_{2}$	MIPMA.054040	54	90.5	55.5	11/ ₂ in
54 x 2	MIPMA.054050	54	90.5	55.5	2 in
$76 \times 2^{1}/_{2}$	MIPMA.076065	76.1	95	40	21/ ₂ in
76 x 3	MIPMA.076080	76.1	115	60	3 in
89 x 3	MIPMA.089075	88.9	107	44	3 in
108 x 4	MIPMA.108100	108	160	75	4 in

Female Adaptor

Technical specifications

SIZE	CODE	D	L	Z	Rp
15 x ¹ / ₂	MIPFA.015015	15	41	9	1/ ₂ in
15 x ³ / ₄	MIPFA.015020	15	40	7	3/ ₄ in
22 x ¹ / ₂	MIPFA.022015	22	43	10	1/ ₂ in
22 x ³ / ₄	MIPFA.022020	22	43	9	3/ ₄ in
22 x 1	MIPFA.022025	22	50	10	1 in
28 x ³ / ₄	MIPFA.028020	28	44	8	3/ ₄ in
28 x 1	MIPFA.028025	28	50	8	1 in
35 x 1	MIPFA.035025	35	54	9	1 in
35 x 1 ¹ / ₄	MIPFA.035032	35	56	9	1 ¹ / ₄ in
$42 \times 1^{1}/_{4}$	MIPFA.042032	42	76	21	1 ¹ / ₄ in
42 x 1 ¹ / ₂	MIPFA.042040	42	76	21	1 ¹ / ₂ in
54 x 1 ¹ / ₂	MIPFA.054040	54	87	22	1 ¹ / ₂ in
54 x 2	MIPFA.054050	54	87	22	2 in
$76 \times 2^{1}/_{2}$	MIPFA.076065	76.1			2 ¹ / ₂ in
76 x 3	MIPFA.076080	76.1			3 in
89 x 3	MIPFA.089080	88.9			3 in
108 x 4	MIPFA.108100	108			4 in





Technical specifications

3	SIZE	CODE	D	L
	15	MIPEC.000015	15	29
	22	MIPEC.000022	22	30
	28	MIPEC.000028	28	30
	35	MIPEC.000035	35	34
	42	MIPEC.000042	42	45
	54	MIPEC.000054	54	49
	76	MIPEC.000076	76.1	76
	89	MIPEC.000089	88.9	85
	108	MIPEC.000108	108	97
	168	MIPEC.000168		

End Cap

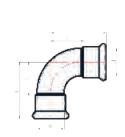




Technical specifications

SIZE	CODE	D	L	Z
15	MIPE9.000015	15	39	19
22	MIPE9.000022	22	48	27
28	MIPE9.000028	28	57	34
35	MIPE9.000035	35	76	50
42	MIPE9.000042	42	80	50
54	MIPE9.000054	54	100	65
76	MIPE9.000076	76.1	150	95
89	MIPE9.000089	88.9	173	110
108	MIPE9.000108	108	215	139
168	MIPE9.000168	168.3	346	231

Elbow 90 deg





Elbow 45 deg





Technical specifications

SIZE	CODE	D	L	Z
15	MIPE4.000015	15	36	16
22	MIPE4.000022	22	42	21
28	MIPE4.000028	28	43	20
35	MIPE4.000035	35	56	30
42	MIPE4.000042	42	62	32
54	MIPE4.000054	54	62	27
76	MIPE4.000066	76.1	102	47
89	MIPE4.000078	88.9	117	54
108	MIPE4.000090	108	139	63
168	MIPE4.000168	168.3	230	105

Elbow 90 deg Male



Technical specifications

SIZE	CODE	D	L	L1	Z	R
15 x ¹ / ₂	MIPEM.015015	15	41	48	21	1/ ₂ in
22 x ³ / ₄	MIPEM.022020	22	48	60	27	3/ ₄ in
28 X 1	MIPEM.028025	28	57	67	34	1 in
$35 \times 1^{1}/_{4}$	MIPEM.035032	35	76	88	50	1 ¹ / ₄ in
$42 \times 11/_{2}$	MIPEM.042040	42	80	88	50	11/ ₂ in
54 X 2	MIPEM.054050	54	100	106	65	2 in

Elbow Spigot 90 deg





SIZE	CODE	D	L	L1	Z
15	MISE9.000015	15	39.3	45	19
22	MISE9.000022	22	48	54	27
28	MISE9.000028	28	57	68	34
35	MISE9.000035	35	76	79	50
42	MISE9.000042	42	80	87	50
54	MISE9.000054	54	100	107	65
76	MISE9.000076	76.1	150	158	95
89	MISE9.000089	88.9	173	191	110
108	MISE9.000108	108	215	238	139

Elbow Spigot 45 deg

Technical specifications

SIZE	CODE	D	L	L1	Z
15	MISE4.000015	15	36	42	16
22	MISE4.000022	22	42	52	21
28	MISE4.000028	28	43	49	20
35	MISE4.000035	35	56	62	30
42	MISE4.000042	42	62	69	32
54	MISE4.000054	54	62	69	27
76	MISE4.000076	76.1	102	110	47
89	MISE4.000089	88.9	117	128	54
108	MISE4.000108	108	139	160	63



Technical specifications

CODE	D	L	L1	Z	Z1	Rp
MIPEF.015015	15	41	44	21	29	1/ ₂ in
MIPEF.022020	22	48	56	27	39	3/ ₄ in
MIPEF.028025	28	57	67	34	44	1 in
MIPEF.035032	35	76	86	50	61	1 ¹ / ₄ in
MIPEF.042040	42	N/A	N/A	N/A	N/A	1 ¹ / ₂ in
MIPEF.054050	54	N/A	N/A	N/A	N/A	2 in
	MIPEF.015015 MIPEF.022020 MIPEF.028025 MIPEF.035032 MIPEF.042040	MIPEF.015015 15 MIPEF.022020 22 MIPEF.028025 28 MIPEF.035032 35 MIPEF.042040 42	MIPEF.015015 15 41 MIPEF.022020 22 48 MIPEF.028025 28 57 MIPEF.035032 35 76 MIPEF.042040 42 N/A	MIPEF.015015 15 41 44 MIPEF.022020 22 48 56 MIPEF.028025 28 57 67 MIPEF.035032 35 76 86 MIPEF.042040 42 N/A N/A	MIPEF.015015 15 41 44 21 MIPEF.022020 22 48 56 27 MIPEF.028025 28 57 67 34 MIPEF.035032 35 76 86 50 MIPEF.042040 42 N/A N/A N/A	MIPEF.015015 15 41 44 21 29 MIPEF.022020 22 48 56 27 39 MIPEF.028025 28 57 67 34 44 MIPEF.035032 35 76 86 50 61 MIPEF.042040 42 N/A N/A N/A N/A

Elbow 90 deg Female



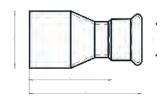
Wallplate Elbow Female

SIZE	CODE	D	L	L1	Z	Z1	Rp
15 x ¹ / ₂	MIPEW.015015	15	53	48	33	14	1/ ₂ in
22 x ³ / ₄	MIPEW.022020	22	59	51	38	18	3/ ₄ in
28 x 1	MIPEW.028025	28	N/A	N/A	N/A	N/A	1 in



Spigot to Pressfit Reducer



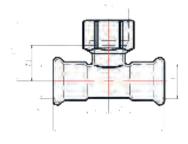


Technical specifications

reclinical specification							
SIZE	CODE	D	D1	L	Z		
22 x 15	MISRO.022015	22	15	63	43		
28 x 15	MISRO.028015	28	15	69	22		
28 x 22	MISRO.028022	28	22	72	51		
35 x 15	MISRO.035015	35	15	79	58		
35 x 22	MISRO.035022	35	22	79	58		
35 x 28	MISRO.035028	35	28	78	55		
42 x 15	MISRO.042015	42	15	92	71		
42 x 22	MISRO.042022	42	22	92	71		
42 x 28	MISRO.042028	42	28	89	66		
42 x 35	MISRO.042035	42	35	86	60		
54 x 15	MISRO.054015	54	15	112	91		
54 x 22	MISRO.054022	54	22	112	91		
54 x 28	MISRO.054028	54	28	106	83		
54 x 35	MISRO.054035	54	35	104	78		
54 x 42	MISRO.054042	54	42	102	72		
76 x 42	MISRO.076042	76.1	42	129	44		
76 x 54	MISRO.076054	76.1	54	129	33		
89 x 54	MISRO.089054	88.9	54	144	46		
89 x 76	MISRO.089076	88.9	76.1	145	27		
108 x 54	MISRO.108054	108	54	185	54		
108 x 76	MISRO.108076	108	76.1	185	54		
108 x 89	MISRO.108089	108	88.9	178	39		
168 x 108	MISRO.168108	168	108				

Female Thread Tee



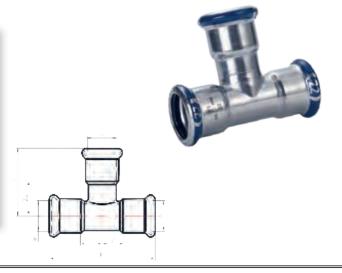


					'		
SIZE	CODE	D	L	L1	Z	Z1	R
15 x ¹ / ₂	MIPTF.015015	15	64	37	12	22	1/ ₂ in
22 x ¹ / ₂	MIPTF.022015	22	74	39	16	24	1/ ₂ in
22 x ³ / ₄	MIPTF.022020	22	74	40	16	24	3/ ₄ in
28 x ¹ / ₂	MIPTF.028015	28	84	42	19	27	1/ ₂ in
28 x ³ / ₄	MIPTF.028020	28	84	43	19	27	3/ ₄ in
28 x 1	MIPTF.028025	28	84	44	19	27	1 in
35 x ¹ / ₂	MIPTF.035015	35	100	46	25	31	1/ ₂ in
35 x ³ / ₄	MIPTF.035020	35	100	47	25	31	3/ ₄ in
35 x 1 ¹ / ₄	MIPTF.035032	35	100	48	25	31	11/ ₄ in
$42 \times \frac{1}{2}$	MIPTF.042015	42	114	49	27	34	1/ ₂ in
42 x ³ / ₄	MIPTF.042020	42	114	50	27	34	3/ ₄ in
$42 \times 11/_{2}$	MIPTF.042040	42	114	51	27	34	11/ ₂ in
54 x ¹ / ₂	MIPTF.054015	54	138	55	35	40	1/ ₂ in
54 x ³ / ₄	MIPTF.054020	54	138	56	35	40	3/ ₄ in
54 x 2	MIPTF.054050	54	138	57	35	40	2 in
$76 \times \frac{3}{4}$	MIPTF.076020	76.1	230	52	60	67	3/ ₄ in
76 x 2	MIPTF.076050	76	230	65	60	67	2 in
89 x ³ / ₄	MIPTF.089020	88.9	260	59	67	74	3/ ₄ in
89 x 2	MIPTF.089050	88.9	260	72	67	74	2 in
108 x ³ / ₄	MIPTF.108020	108	310	69	79	84	3/ ₄ in
108 x 2	MIPTF.108050	108	310	82	79	84	2 in

Tee

Technical specifications

SIZE	CODE	D	L	L1	Z	Z1	
15	MIPTE.000015	15	64	41	12	21	
22	MIPTE.000022	22	74	46	16	25	
28	MIPTE.000028	28	84	51	19	28	
35	MIPTE.000035	35	100	57	24	31	
42	MIPTE.000042	42	114	65	27	35	
54	MIPTE.000054	54	138	75	34	40	
76	MIPTE.000076	76.1	230	109	60	54	
89	MIPTE.000089	88.9	260	125	67	62	
108	MIPTE.000108	108	310	146	79	70	
168	MIPTE.000168	168.3	520	243.6	118	125.1	

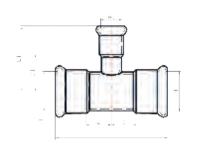


Technical specifications

Technical specifications								
	SIZE	CODE	D	D1	L	L1	Z	Z1
	22 x 15	MIPTR.022015	22	15	74	44	16	24
	28 x 15	MIPTR.028015	28	15	84	47	19	27
	28 x 22	MIPTR.028022	28	22	84	49	19	28
	35 x 15	MIPTR.035015	35	15	100	51	25	32
	35 x 22	MIPTR.035022	35	22	100	53	25	32
	35 x 28	MIPTR.035028	35	28	100	55	25	32
	42 x 15	MIPTR.042015	42	15	114	54	27	35
	42 x 22	MIPTR.042022	42	22	114	56	27	35
	42 x 28	MIPTR.042028	42	28	114	58	27	35
	42 x 35	MIPTR.042035	42	35	114	61	27	36
	54 x 15	MIPTR.054015	54	15	138	59	35	41
	54 x 22	MIPTR.054022	54	22	138	62	35	41
	54 x 28	MIPTR.054028	54	28	138	64	35	41
	54 x 35	MIPTR.054035	54	35	138	67	35	42
	54 x 42	MIPTR.054042	54	42	138	71	35	41
	76 x 22	MIPTR.076022	76.1	22	230	74	60	53
	76 x 28	MIPTR.076028	76.1	28	230	76	60	53
	76 x 35	MIPTR.076035	76.1	35	230	76	60	50
	76 x 42	MIPTR.076042	76.1	42	230	80	60	50
	76 x 54	MIPTR.076054	76.1	54	230	86	60	51
	89 x 22	MIPTR.089022	88.9	22	260	85	67	58
	89 x 28	MIPTR.089028	88.9	28	260	87	67	58
	89 x 35	MIPTR.089035	88.9	35	260	89	67	58
	89 x 42	MIPTR.089042	88.9	42	260	91	67	58
	89 x 54	MIPTR.089054	88.9	54	260	93	67	58
	89 x 76	MIPTR.089076	88.9	76.1	260	116	67	61
	108 x 22	MIPTR.108022	108	22	310	95	79	68
	108 x 28	MIPTR.108028	108	28	310	97	79	68
	180 x 35	MIPTR.108035	108	35	310	99	79	68
	180 x 42	MIPTR.108042	108	42	310	101	79	68
	108 x 54	MIPTR.108054	108	54	310	103	79	68
	108 x 76	MIPTR.108076	108	76.1	310	126	79	71
	108 x 89	MIPTR.108089	108	88.9	310	135	79	72
	168 x 76	MIPTR.168076	168	76.1	520	160	118	105.4
	168 x 108	MIPTR.168108	168	108	520	186	118	114.7

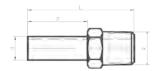
Reducing Tee





Spigot Adaptors Male





Technical specifications

Technical specifications

SIZE	CODE	D	L	Z	R
15 x ¹ / ₂	SISTM.015015	15	57	32	1/ ₂ in
22 x ³ / ₄	SISTM.022020	22	62	38	3/ ₄ in
28 x 1	SISTM.028025	28	75	39	1 in
35 x 1 ¹ / ₄	SISTM.035032	35	80	80	11/ ₄ in
42 x 1 ¹ / ₂	42 x 1 ¹ / ₂ SISTM.042040		83	80	1 ¹ / ₂ in
54 x 2	SISTM.054050	54	102	85	2 in

Spigot Adaptors Female

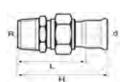




SIZE	CODE	D	L	Z	R
15 x ¹ / ₂	SISTF.015015	15	53	32	1/ ₂ in
22 x ³ / ₄	SISTF.022020	22	60	38	3/ ₄ in
28 x 1	SISTF.028025	28	60	39	1 in
35 x 1 ¹ / ₄	SISTF.035032	35	110	80	1 ¹ / ₄ in
$42 \times 1^{1}/_{2}$	SISTF.042040	42	110	80	1 ¹ / ₂ in
54 x 2	SISTF.054050	54	120	85	2 in

Unions Male



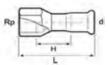


Technical specifications

SIZE	CODE	D	L	Z	R
15 x ¹ / ₂	MIPMU.015015	15	72	20	¹ / ₂ in
$22 \times \frac{3}{4}$	MIPMU.022020	22	75	21	3/ ₄ in
28 x 1	MIPMU.028025	28	82	23	1 in
35 x 1 ¹ / ₄	MIPMU.035032	35	89	26	11/ ₄ in
$42 \times 11/_{2}$	MIPMU.042040	42	93	30	1 ¹ / ₂ in
54 x 2	MIPMU.054050	54	109	35	2 in

Unions Female





SIZE	CODE	D	L	Z	R
15 x ¹ / ₂	MIPFU.015015	15	73	40	1/ ₂ in
22 x ³ / ₄	MIPFU.022020	22	76	40	3/ ₄ in
28 x 1	MIPFU.028025	28	83	43	1 in
35 x 1 ¹ / ₄	MIPFU.035032	35	93	49	1 ¹ / ₄ in
42 x 1 ¹ / ₂	MIPFU.042040	42	96	47	1 ¹ / ₂ in
54 x 2	MIPFU.054050	54	113	54	2 in

Technical specifications

SIZE	CODE	d	Nominal flange size	D	Р	L	Т
1/2	MIFAE.015015	15	15	95	67	30	6
3/4	MIFAE.022020	22	20	102	73	32	6
1	MIFAE.028025	28	25	114	83	36	7
11/4	MIFAE.035032	35	32	121	87	41	8
11/2	MIFAE.042040	42	40	133	98	46	9
2	MIFAE.054050	54	50	152	114	50	10
3	MIFAE.076080	76.1	80	185	146	77	11
3	MIFAE.089080	88.9	80	185	146	91	11
4	MIFAE.108100	108	100	215	178	107	13

ANSI and DIN flanges also available.

Adaptor Flanges



Technical specifications

CODE	d	H1	Н	K	K1	Weight gram
SISB1.000015	15	122	60	21	83	76
SISB1.000022	22	124	50	7	81	110
SISB1.000028	28	136	45	7	47	146
SISB1.000035	35	234	62	30	110	381
SISB1.000042	42	276	94	41	144	558
SISB1.000054	54	337	117	65	165	869
SISB1.000076	76.1	230	226	65	65	1.607
SISB1.000089	88.9	260	240	80	80	2.109
SISB1.000108	108	291	222	95	95	2.546

Pipe Bend 15°



Technical specifications

CODE	d	H1	Н	K	K1	Weight gram
SISB3.000015	15	122	60	21	83	76
SISB3.000022	22	124	50	6	80	110
SISB3.000028	28	130	54	7	47	144
SISB3.000035	35	218	80	30	110	382
SISB3.000042	42	274	98	44	144	560
SISB3.000054	54	324	137	65	165	905
SISB3.000076	76.1	200	202	66	66	1.41
SISB3.000089	88.9	262	264	80	80	2.183
SISB3.000108	108	259	272	95	95	2.622

Pipe Bend 30°



Technical specifications

CODE	d	H1	Н	K	K1	Weight gram
SISB4.000015	15	120	62	19	77	76
SISB4.000022	22	120	56	7	71	111
SISB4.000028	28	122	58	2	66	146
SISB4.000035	35	206	94	20	132	380
SISB4.000042	42	262	114	1	149	576
SISB4.000054	54	321	146	37	212	928
SISB4.000076	76.1	225	225	69	69	1.577
SISB4.000089	88.9	267	267	103	103	2.323
SISB4.000108	108	293	293	66	66	2.901

Pipe Bend 45°



Pipe Bend 60°



Technical specifications

CODE	d	H1	Н	K	K1	Weight gram
SISB6.000015	15	122	60	21	83	76
SISB6.000022	22	118	60	5	63	112
SISB6.000028	28	116	71	7	47	140
SISB6.000035	35	226	101	30	110	383
SISB6.000042	42	251	124	44	145	564
SISB6.000054	54	308	162	65	165	889
SISB6.000076	76.1	219	223	70	70	1.479
SISB6.000089	88.9	250	257	80	80	1.996
SISB6.000108	108	288	298	95	95	2.78

Pipe Bend 75°



Technical specifications

CODE	d	H1	Н	K	K1	Weight gram
SISB7.000015	15	117	66	22	73	77
SISB7.000022	22	118	64	9	63	114
SISB7.000028	28	114	71	7	50	150
SISB7.000035	35	200	110	26	119	393
SISB7.000042	42	251	137	44	158	595
SISB7.000054	54	305	178	60	187	960
SISB7.000076	76.1	240	240	62	62	1.682
SISB7.000089	88.9	280	280	90	90	2.436
SISB7.000108	108	345	345	60	60	3.416

Pipe Bend 90°



Technical specifications

CODE	d	H1	Н	K	K1	Weight gram
SISB9.000015	15	120	70	22	72	59
SISB9.000022	22	120	70	9	59	102
SISB9.000028	28	125	97	7	47	153
SISB9.000035	35	200	120	30	110	183
SISB9.000042	42	250	160	44	144	565
SISB9.000054	54	305	200	65	165	868
SISB9.000076	76.1	250	250	62	62	1.752
SISB9.000089	88.9	291	291	90	90	2.532
SISB9.000108	108	364	364	45	45	3.604

Pipe Bridge

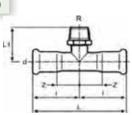


CODE	d	H1	Н	K	K1	Weight gram
SISPB.000015	15	202	38	65	74	74
SISPB.000022	22	233	40	68	158	158
SISPB.000028	28	303	64	93	258	258

Technical specifications

SIZE CODE MIPTM.015015 15-1/2 -15 74 38 16 15 37 75 MIPTM.022020 22-3/4-22 82 43 18 17 41 105 MIPTM.028025 130 28-1-28 92 50 22 21 46 MIPTM.035032 35-11/4-35 102 56 24 28 51 170

Male Centred Tee

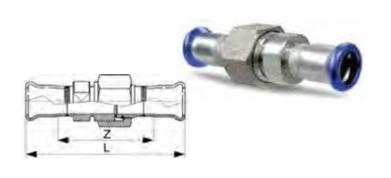




Technical specifications

CODE	D-RP	L	Z	Weight gram
MIPPU.015015	15	97	55	154
MIPPU.022022	22	105	59	215
MIPPU.028028	28	111	63	334
MIPPU.035035	35	124	70	521
MIPPU.042042	42	134	70	620
MIPPU.054054	54	144	70	940

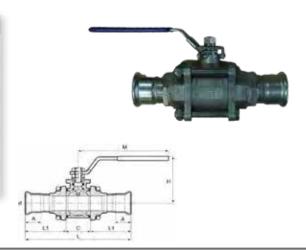
Pipe Barrel Union



Technical specifications

CODE	d	L	L1	С	Α	M	Н	Weight gram
MIPBV.00015	15	118	48	22	20	105	57	454
MIPBV.00022	22	133	51	31	21	110	67	860
MIPBV.00028	28	147.9	55	37.9	24	130	85	1.054
MIPBV.00035	35	177	65	47	27	130	85	1.922
MIPBV.00042	42	205	74	57	32	160	100	2.584
MIPBV.00054	54	228	80	68	38	160	110	3.500
MIPBV.00076	76.1	316	115	86	55	235	130	9.180
MIPBV.00089	88.9	346	124	98	64	245	140	12.98
MIPBV.00108	108	432	153	126	78	330	170	20.24

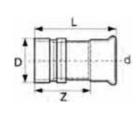
3 Piece Pressfit Ball Valve



Technical specifications

CODE	d-D	L	Z	Weight gram
MIPRG.028025	28 x 33.7	87	63	171
MIPRG.035032	35 x 42.4	94.5	67.5	239
MIPRG.042040	42 x 48.3	105.5	73.5	298
MIPRG.054050	54 x 60.3	124	87	429
MIPRG.076065	76.1 x 76.1	150	95	986
MIPRG.089080	88.9 x 88.9	165.5	102.5	1.229
MIPRG.108100	108 x 114.4	184	107	1.393

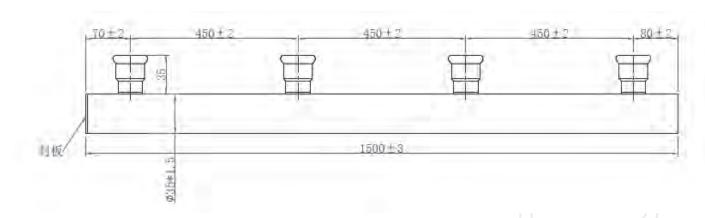
Roll Groove Adaptor

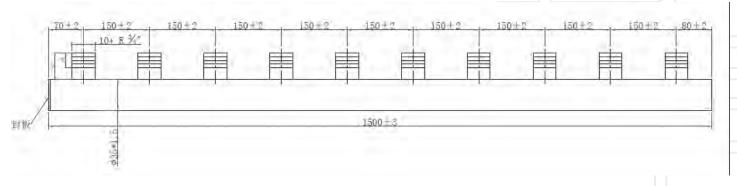


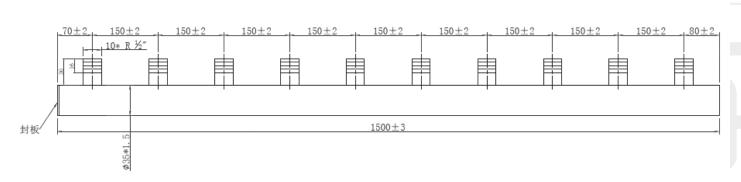


Meter Prefab Manifolds

		 	 0. 0. 0 0
CODE			







TOOLS & ACCESSORIES

Technical specifications Replacement O-Rings

PIPE SIZE	PRODUCT CODE FKM	PRODUCT CODE HNBR	PRODUCT CODE PTFE (Teflon)
15	SFOFG.000015	SHOHY.000015	SPOPW.000015
22	SFOFG.000022	SHOHY.000022	SPOPW.000022
28	SFOFG.000028	SHOHY.000028	SPOPW.000028
35	SFOFG.000035	SHOHY.000035	SPOPW.000035
42	SFOFG.000042	SHOHY.000042	SPOPW.000042
54	SFOFG.000054	SHOHY.000054	SPOPW.000054
76.1	SFOFG.000076	SHOHY.000076	SPOPW.000076
88.9	SFOFG.000089	SHOHY.000089	SPOPW.000089
108	SFOFG.000108	SHOHY.000108	SPOPW.000108
168.3	SFOFG.000168	SHOHY.000168	SPOPW.000168



Fig 3.20

Bolted Clip Head Stainless Steel

Technical specifications

1	PIPE SIZE	DESCRIPTION	PRODUCT CODE
	15mm	SS Bolted Clip Head M10	BCHSS15M10
	22mm	SS Bolted Clip Head M10	BCHSS22M10
	35mm	SS Bolted Clip Head M10	BCHSS35M10
	42mm	SS Bolted Clip Head M10	BCHSS42M10
1	54mm	SS Bolted Clip Head M10	BCHSS54M10
	75mm	SS Bolted Clip Head M10	BCHSS76M10
i	89mm	SS Bolted Clip Head M10	BCHSS89M10
	108mm	SS Bolted Clip Head M10	BCHSS108M10
	168mm	SS Bolted Clip Head M10	BCHSS168M10



Fig 3.21

Technical specifications

PIPE SIZE	DESCRIPTION	PRODUCT CODE
15mm	Clip Head w bolt SS	CHSS15
22mm	Clip Head w bolt SS	CHSS22
35mm	Clip Head w bolt SS	CHSS35
42mm	Clip Head w bolt SS	CHSS42
54mm	Clip Head w bolt SS	CHSS54
75mm	Clip Head w bolt SS	CHSS76
89mm	Clip Head w bolt SS	CHSS89
108mm	Clip Head w bolt SS	CHSS108
168mm	Clip Head w bolt SS	CHSS168
	T-Bracket SS	HTNP.015108
	Wall Plate M10 SS	SSHSCMP10

Clip Head Stainless Steel





Fig 3.22

Bolted Clip Head Zinc Insulated

Technical specifications



PIPE SIZE	DESCRIPTION	PRODUCT CODE
15mm	Insulated Zinc Bolted Clip M10	BCHZI.012015
22mm	Insulated Zinc Bolted Clip M10	BCHZI.020025
35mm	Insulated Zinc Bolted Clip M10	BCHZI.032035
42mm	Insulated Zinc Bolted Clip M10	BCHZI.040042
54mm	Insulated Zinc Bolted Clip M10	BCHZI.050054
75mm	Insulated Zinc Bolted Clip M10	BCHZI.063067
89mm	Insulated Zinc Bolted Clip M10	BCHZI.083091
108mm	Insulated Zinc Bolted Clip M10	BCHZI.108110
168mm	Insulated Zinc Bolted Clip M11	BCHZI.165168

Fig 3.23



Technical specifications

DESCRIPTION	PRODUCT CODE
Internal & External Deburrer 15-54mm	TR05
Rotary Pipe Cutter 15-35mm	PC35/SS
Rotary Pipe Cutter 15-76mm	PC76/SS
Rotary Pipe Cutter 54-108mm	PC140
Replacement Wheel 15-35mm	PCW35/SS
Replacement Wheel 15-76mm	PCW76/SS
Replacement Wheel 54-108mm	PCW140
	PEC170E
	PEC220E

Fig 3.18

BATTERY OPTIONS



Technical specifications

DESCRIPTION	PRODUCT CODE
18V Li-ion 3.0AH	M18BX-1
18V Li-ion 4.0AH	M18B4
18V Li-ion 5.0AH	M18B5

Fig 3.19

Press Tools Technical specifications

CODE	DESCRIPTION
ACO203BT	15-54mm Press Tool
ACO203XL	15-108mm Press Tool
ACO403BT	76-168mm Press Tool

Fig3.24







ACO203XL ACO403

M Profile - Standard Pressure

Technical specifications

Select Jaw or Collar:						
JAW	DESCRIPTION	ITEM				
15mm	15mm M profile jaw	M15				
22mm	22mm M profile jaw	M22				
28mm	28mm M profile jaw	M28				
35mm	35mm M profile jaw	M35				
ADAPTORS						
	Use With Collars					
42 - 54mm	42 - 54mm Adaptor	ZB203				
76 - 108mm	76mm - 108mm step1 Adaptor	ZB221				
108mm	108mm step2 Adaptor	ZB222				
COLLAR						
42mm	42mm M profile collar	M42				
54mm	54mm M profile collar	M54				
76mm	76mm M profile collar	M76.1				
89mm	89mm M profile collar	M88.9				
108mm	108mm M profile collar	M108				
168mm	168mm M profile collar	168.3				

Jaws 15 to 54mm



Adaptors 42 to 54mm



Technical specifications

Select Jaw or Collar:						
ADAPTOR	DESCRIPTION	ITEM				
28 - 54mm	28 - 54mm Adaptor	ZB203				
76 - 108mm	76mm - 108mm step1 Adaptor	ZB221				
COLLAR						
28mm	28mm M profile HP collar	HP 28				
35mm	35mm M profile HP collar	HP 35				
42mm	42mm M profile HP collar	HP 42				
54mm	54mm M profile HP collar	HP 54				
76mm	76mm M profile HP collar	HP 76.1				
89mm	89mm M profile HP collar	HP88.9				
108mm	108mm M profile HP collar	HP108				

M Profile - High Pressure





Collars 28 to 108mm



PRODUCT SPECIFICATION & INFORMATION

3.1 SUREPRESS STAINLESS STEEL TUBE

SUREPRESS 316L (EN 1.4404) Stainless Steel tube is a longitudinally seam welded, thin walled pipe complying to EN 10088. The material is a high-alloy, austenitic, Cr-Ni-Mo steel with low carbon (0.013%) and high Molybdenum content of (2.3%) for an increased corrosion resistance. Fabricated to correspond to the requirements of EN 10312 and DVGW 541. The tube is compliant to AS5200.053 and has Watermark Approval. It is supplied in 6M lengths with an Outside Diameter range od 15mm-168.3mm. Surepress tube has a high polished finish which is aesthetically pleasing, hygienic and highly durable.

Technical Data

Nominal Diameter DN	d x s in mm	d _i in mm	A _i in mm²	Mass in kg/m	Water Content l/m
15	18 x 1,0	16,0	176,7	0,426	0,1767
20	22 x 1,2	19,6	301,7	0,640	0,3017
25	28 x 1,2	25,6	514,7	0,806	0,5147
32	35 x 1,5	32,0	804,2	1,297	0,8042
40	42 x 1,5	39,0	1194,6	1,500	1,1946
50	54 x 1,5	51,0	2042,8	1,912	2,0428
65	76,1 x 2,0	72,1	4082,8	3,710	4,0828
80	88,9 x 2,0	84,9	5661,2	4,350	5,6612
100	108 x 2,0	104,0	8494,9	5,310	8,4949
150	168,3 x 2,0	164,3	21201,4	8,331	21,2014

Fig3.0



3.2 SUREPRESS STAINLESS STEEL PRESS FITTINGS

SUREPRESS 316L Stainless Steel Fittings are manufactured from 316L (EN 1.4404) to AS3688 from high-alloy, austenitic, CR-Ni-Mo with low carbon (0.013%) and high Molybdenum content of (2.3%) for an increased corrosion resistance. Fabricated to correspond to the requirements of EN 10312 and DVGW 541. EPDM O-rings are factory fitted as standard with the option of FKM, HNBR & PTFE on request. Surepress can assist with choosing the best performing O-ring for your application.

M-Profile



Fig 3.1

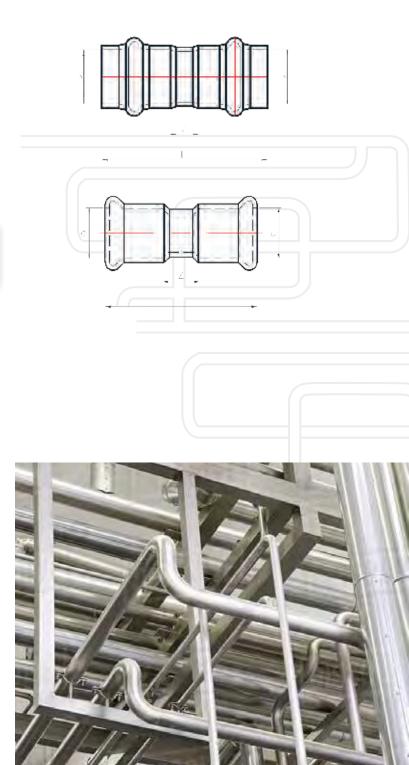
3.2.1 'M' Versus 'V' Profiles

The first prototype for press fittings was developed by Swedish Engineer Gunnar Larsson back in 1950. Subsequently in 1964 following the lodgement of a patent a German manufacturer began producing the product and introduced it to the European Market. Since that time there have been multiple advancements in press technology and its usage across a wide spectrum of applications.

Two different profiles, which is best? 'M' V's 'V' profiles are a frequent talking point in the market but, they both conform to the same standards and undergo the

same rigorous testing procedures. Pressure ratings, tooling and media applications are also the same although different jaws and collars are required to press the different profiles. There is no advantage in regards flow rates nor is there any restriction in performance of either type. There is an argument that a second press after the O-ring is a benefit, but this is usually pushed by the manufacturers of that profile. The choice really is up to the contractor and it is for this reason that SUREPRESS offer both 'M' & 'V" profiles.

There is one advantage to 'M' profile however, it is available from 15mm to 168.3mm whereas 'V' profile is only manufactured up to and including 54mm.



3.3 O-RINGS

3.3.1 EPDM (Standard)

SUREPRESS Stainless Steel fittings are available with a variety of different O-rings dependent on the media suitability. EPDM (Ethylene Propylene) are factory installed and are contoured (Leak Path) to assist in identifying un-pressed fittings.

3.3.2 FKM (Industrial)

FKM (Flurocarbon) O-rings are utilised when resitance to higher temperatures are required up to 200°C. This is media dependent. The material has excellent resistance to mineral oils, petroleum products, greases, some acids and compressed air. Contact SUREPRESS for application suitability.

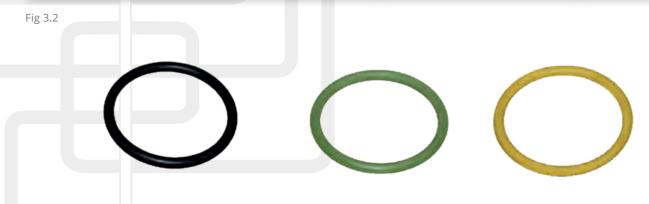
3.3.3 HNBR (Gas)

HNBR (Hydrogenated Nitrile Butadiene Rubber)
O-rings are suitable for a wide range of gas
applications including natural gas, propane, LPG and
Butane.

Contact SUREPRESS for application suitability.



		SUREPRESS O-RIN	NG SPECIFICATIONS	
Г	Colour	Black	Green	Yellow
	Material	EPDM	FKM	HNBR
ı	Temperature Range	-10°C - +110°C	-10°C - +180°C	-10°C - +70°C
	Diameter	15-168mm	15-168mm	15-168mm
	Typical Applications	Drinking Water	Compressed Air	NPG
		Fire	Diesel Oil	LPG
		Rain Water	Mineral Oil	Butane
		Heating	Greases	
		Process Water	Petroleum Products	
		Carbon Dioxide	Some Acids	
L		Demineralised Water	Urea	



3.4 PRESS TOOLS

Surepress offer premium quality German manufactured tooling with the latest 'state of the art' technology. Our range comes with a range of features including Smart Technology, lightweight brushless motors and Bluetooth data transfer all of which result

in increased efficiency. The ACO203 model now has LED illumination of the joint area for safe working, plus lower maintenance requirements and increased performance. (40% more presses per battery charge)



SUREPRESS PRESS TOOLS	ACO203	ACO203XL	ACO403
Nominal Diameters	Nominal Diameters up to 54mm		76.1 to 168.3mm
Piston Force	32kN	32kN	120kN
Stroke	40mm	80mm	60mm
Mass	2.8kg (inc Battery)	3.9kg (inc Battery)	13.0kg
Length	387mm	460mm	650mm
Width	75mm	83mm	95mm
Height	111mm	113mm	320mm
Recorded Electrical Power	450W	450W	450W
Battery Pack	18V Li-ion 1.5Ah & 3.0Ah	18V Li-ion 3.0Ah	18V Li-ion 3.0Ah & 5.0Ah
Battery Capacity (1)	80/160 press cycles	Up to 250 press cycles	20/30 press cycles
Charging Time (2)	approx 30-60min	approx 30-60mins	60-120mins

Fig 3.3

- 1-depending on the nominal diameter u. material
- 2-depending on the battery capacity

3.4.1 Press Jaws & Collars





SUREPRESS TOOLS	PRESSING JAWS	PRESSING COLLARS
Nominal Diameter	up to 35mm	42-54mm (with ACO203XL up to 108mm) 76.1-168.3
Mass	1.5kg	2.5kg-13KG
Available Profiles	M & V	







INSTALLATION CONSIDERATIONS

4.1 TUBE CUTTING AND DE-BURRING

It is important when cutting the tube to use the correct tools to ensure a clean square cut. It is recommended that a pipe cutter with a stainless steel cutting wheel. This item should not have been used to cut other materials including Carbon Steel or Ferrous metals. This will prevent bi-metallic corrosion and a failure point. Slow running electric saws can be used but caution is required. If discoloration is identified, remove the affected area and inspect thoroughly. Heat transfer can alter the material and decrease its corrosion resistance. Angle grinders are not permitted along with oil-cooled saws and tools that cause tarnishing.

Deburr both the inside and outside of the cut to remove any burrs(swarf) that may remain. Burrs can damage the O-ring so their removal is to ensure a leak free installation. Stainles Steel files can also be utilised to deburr with the same precautions as per cutting.

4.2 INSERTION & MARKING

Mark the insertion depth onto the tube or plain end fitting using a waterproof felt pen. It is recommended that a Surepress depth gauge be used so that full insertion is verified. For all fiiting insertion depth details reference Table X.

4.3 PIPE BENDING

Please refer to SUREPRESS for recommended sizes and methods.

4.4 INSULATION

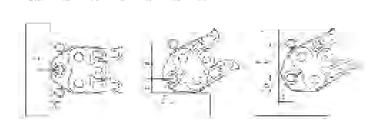
Insulating SUREPRESS is recommend but consideration must be given to the insulation type used. Any insulation coming into contact with 316 stainless must be 'low chloride' with less than 0.05% water soluble chloride content by weight. Failure to use the correct material will result in reduced performance levels of the installed system. Corrosion of the installation can occur at any temperature

4.5 BRACKETING

Brackets are to be installed as per the local recommended standards (AS3500 & AS4041), please refer to the Thermal Expansion section for fixed point and positinal recommendations.

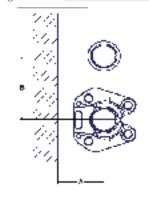
4.6 PRESS CLEARANCES

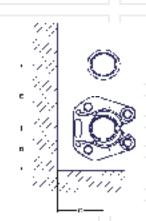
Press tool space requirements for jaws and slings.



Jaws						
Size mm	А	В	С	D	Е	F
15	20	56	25	31	73	135
22	25	65	31	37.5	80	155
28	25	75	31	38.5	83	160
35	30	75	36	45	90	180

Fig3.5





Sling	Α	В	С	D	E
HP35	61	90	61	68	90
M42	61	94	61	68	94
HP42	65	102	65	75	102
M54	68	108	68	73	108
HP54	68	108	68	76	108
M67	81	139	81	98	139
M76.1	88	156	88	108	156
HP76.1	92	161	92	113	161
M108	108	204	108	137	204
HP108	112	208	112	141	208

4.14 Corrosion

Stainless steel consistent with DVGW GW 541 and W 534 commensurate to DIN 50930-6 can be used for drinking water without restrictions. Stainless steel behaves neutrally in drinking water due to the passive layer forming in connection with oxygen. This denotes that reactions with substances found in drinking water do not occur. Washed-in corrosion products from other metallic pipe materials do not therefore elicit corrosion processes on properly designed passive layers in SUREPRESS 316L. A mixed installation of SUREPRESS 316L and all non-ferrous metals can be executed directly and independent of the sequence.

The direct joining of stainless steel with galvanized materials results in bi-metal corrosion of the galvanized steel. A separation of these two pipe materials using a non-ferrous metal armature can occur according to DIN 1988-7 in order to avoid this. Empirically, the installation of a spacer at least 50 mm in length is sufficient for avoiding this type of corrosion.

Pitting corrosion can occur through certain factors, such as sensitisation of the material, false use of desinfectants or excessive chloride contents in drinking water (over 250 mg/l). The sensitisation of the stainless steel can be elicited through the formation of oxide layers and tarnish if heat treatment is improperly conducted (for example, from welding, separation with fast running saws or circular saws) and should be avoided. Only slow running saws are therefore permissible. Likewise, the hot bending of steel pipes is not permissible.

Such a sensitisation of stainless steel can surely be avoided by plastically cold forming the pressing.

External Corrosion

For stainless steel pipes that are laid underground or flush-mounted, corrosion protection bands and heat-shrinkable sleeves consistent with DIN 30672 pressure class A (non-corrosive soil) and/or pressure class B (corrosive soil) can be used for retroactive external corrosion protection. Empirically, coatings consistent with DIN 55928 (protective coats) can applied if they are universal and free of defects. Stainless steel pipes can be utilized with insulation materials according to 1988 with a maximum per cent weight of 0,05% water-soluble chloride ions. Insulating materials of AS-quality, (AS = austenitic steels) consistent with AGI- Q 135, are therefore of recommendation for stainless steels.

Stainless steel pipes that are installed in chlorinecontaining environments (swimming pools for example) require a suitable coating.

4.15 Pressure Testing

Pressure testing should be as per AS3500. This should be 1.5 times the maximum operating pressure or 1,500kPa (15bar or 218psi) whichever is greatest. Note do not exceed the maximum operating pressure of the system. See diagram for more information.

4.16 Flushing

Flushing is to be conducted immediately following the pressure test and start-up of the system according to AS3500. Potable water is recommended. Once complete the system should remain full, if the pipework is to be drained or partially drained following the test it is advisable to use an alternative media such as air or an inert gas. This is to avoid an increased risk of corrosion from water sitting in the pipe.

4.17 Disinfecting the Installation

Prior to commissioning the installation, the system is to be disinfected as per the (ADWG) Australian Drinking Water Guidelines. They provide a list of recommended disinfectant agents. It is possible to use chlorine for this exercise. For example, a constant chlorine allowance of maximum of 1.2ppm chlorine (free chloride in the disinfecting solution) can be added. The threshold of free chloride in purified drinking water may only amount to a maximum of 0.3 mg/l. In an exceptional case, a maximum of 6 mg/l of chlorine (free chloride in the disinfecting solution) is allowed in the event of high/increased microbial contamination. The content of free chloride in the drinking water may in this case be increased to a maximum of 0.6 mg/l.

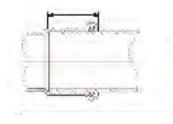
4.18 Maintenance

The installation should be inspected on a regular basis to identify any damage caused by contaminants etc. This should include inspecting the exterior and interior of the pipework and rectifying any potential issues in a timely manner. This will avoid any potential hazards or issues occurring.

4.7 INSTALLATION CLEARANCES

Before installation it is important to identify the minimum spacing requirements between 2 press-fittings and the distance from a wall or floor penetration. This will ensure the optimum deformation of the press. Figure 3.7 shows the insertion depths of both profiles. Figure 3.71 confirms minimum spacing requirements.

M-Profile



d in mm	M-Press Insertion Depth in MM
15	17
22	21
28	23
35	26
42	30
54	35
76.1	55
88.9	63
108	76
168.3	121

27	

	Min Tube Length in mm	Min Exposed Tube in mm
d in mm	M-Profile	M Profile
15	44	10
22	52	10
28	56	10
35	62	10
42	80	20
54	90	20
76.1	165	55
88.9	191	65
108	232	80
168.3	377	135

Fig 3.7

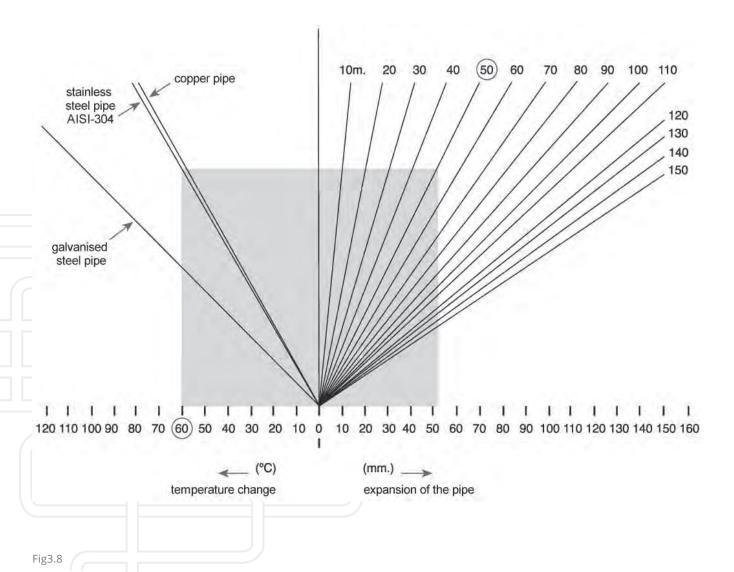


4.8 THERMAL EXPANSION

During operation fluid pipeline installations contract and expand due to temperature fluctuations.

To allow for movement the following must be provided:

- · enough space for longitudinal expansion.
- correct mounting of the corresponding mounting points.
- · expansion compensators if necessary



Application methods for the diagram.

Example: To determine the extension required for a 50m long pipe with a fluid temperature change of 60°C. We go from the 60°C position "temperature change" vertically up to the sloping line of the "rust-proof" pipe. We then turn right up to the other sloping line, which indicated the meters (50m). Then we go vertical.

Solution: 51,5 mm.

The following table, as well as the diagram, can be used for calculating the extension.

ΔT (°K) THERMAL EXPANSION										
L (m)	10	20	30	40	50	60	70	80	90	100
1	0,16	0,33	0,50	0,70	0,82	1,00	1,15	1,32	1,50	1,65
6	1,00	2,00	3,00	4,00	5,00	6,00	7,00	8,00	9,00	10,00
10	1,65	3,30	5,00	6,60	8,25	10,00	11,55	13,20	14,85	16,50

4.8.1 Allowing for Movement

Most installations are, except for industrial installations, seldom visible and are usually installed as flush-mounted and floating along floor coverings. In the case of visibly installed installations or those that run under galleries, - there is usually enough space, certainly in the case of piping that must be cleaned - an elastic protective filling made of insulation material must be used, such as glass wool or plastic (closed-cell foam) (Image1). If an installation is carried out under floating floors, the pipes are installed within the insulating layer, so they can expand unhindered. The vertical outlets and junctions must be equipped with elastic sockets made of insulating material or insulating plastic (Image 2). In the same way, fillings must be used for wall and ceiling pipes, so they can move in every direction (Image 3).

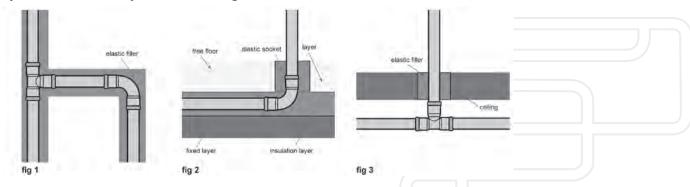


Fig 3.10

4.8.2 Expansion compensators

If piping length fluctuations cannot be absorbed by their own elasticity or with enough space, expansion compensators must be applied. There are three types of expansion compensators: U or Z form or those with internal threading, allowing it to be screwed onto the fixture. The compensators can be bent in a U or Z form or also originate from a straight pipe and angled attachment (Figures 5, 6, 7 and 8). The following method of calculation can be used for calculating the length of the angular offset: - Calculation of the thermal expansion, Calculation of the angular offset length (in the case of compensator2)



L= K√de.∆l

C= Material corestants = 45 (STAIMLESS STEB.) Ite

 Outer diameter of the pipe & = the thermal expansion to be compensated

Fig3.11

If the U type is utilized, the length of the angular offset must be divided by 2 according to the named formula, because there are two expansion arms. For the sake of accuracy, the divided value must equal L/1,8 and not 2.

4.8.3 Expansion bend

As shown in images 5, 6, 7 and 8, correct compensation depends on the adjustment of the fixation and displacement points. A fixation point may not be applied near the fixture. It must also be observed that the floating points may not be applied in such a way that they act as a fixation point. For a straight pipe or expansion compensator, only one fixation point may be applied to avoid deformation, namely in the centre of the straight section if possible to distribute the expansion.

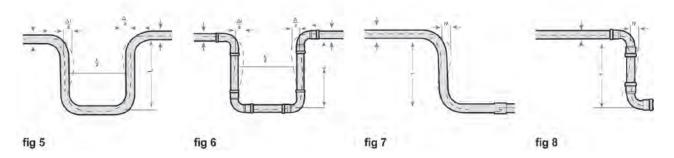


Fig3.12

Based on the thermal expansion of the pipe, the SUREPRESS connection attachments can disrupt pressures by twisting. It must be observed that the permissible torsion angles not be larger than 50° and the length of the lever is dependent on the free length of the pipe. The attached diagram Fig 12 can be used to calculate the lengths of the lever on the compression equipment.

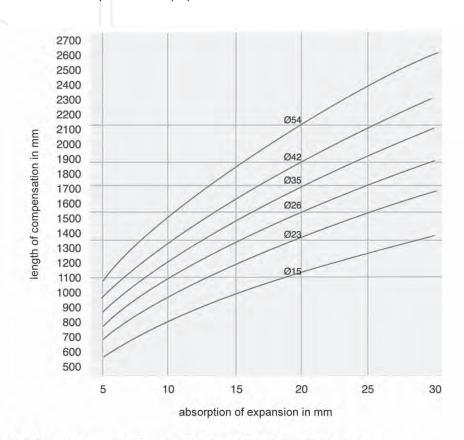


fig 10 determination of the length of the Z-bend expansion compensation

Fig3.13

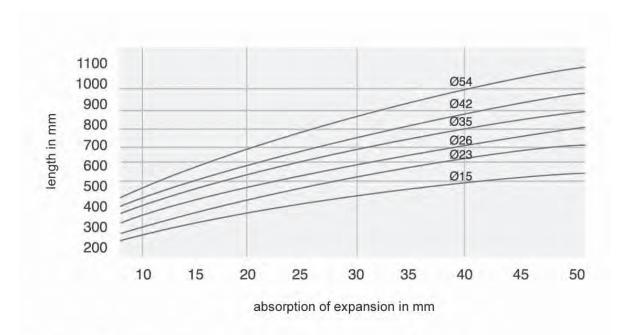


fig 11 determination of the length of the U-bend expansion compensation

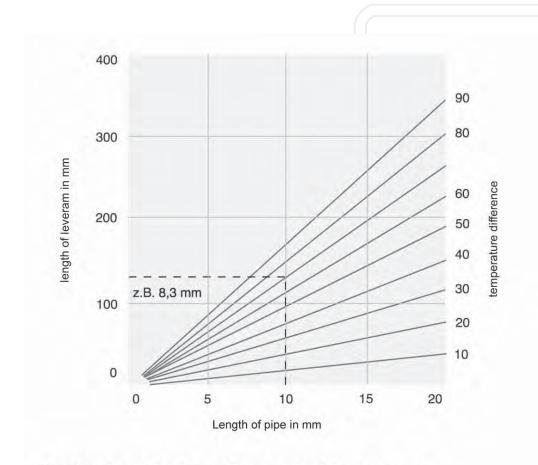


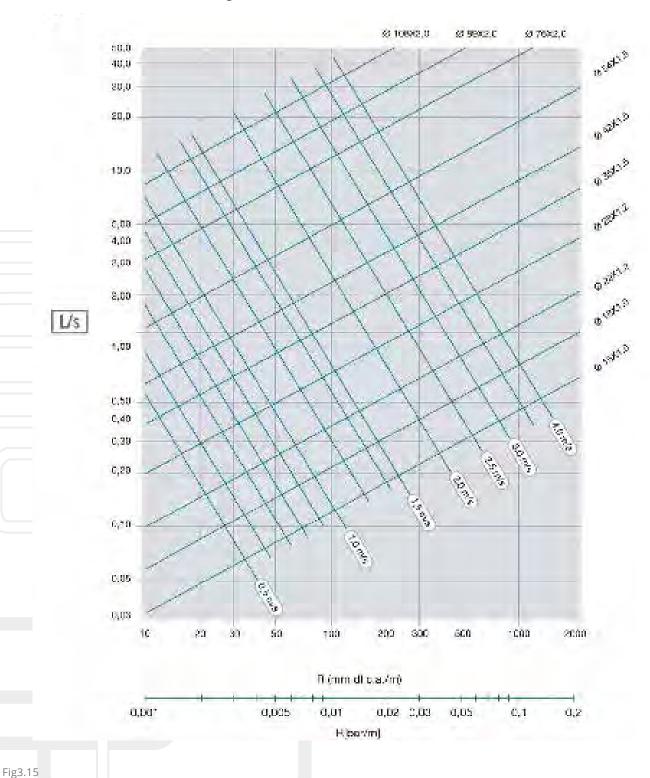
fig 12 determination of the length of the leverarm

4.9 PRESSURE LOSSES

Every liquid that flows through a network of pipes experiences a drop-in pressure due to constantly rubbing against the inner wall of the pipe, changes in direction and turbulences caused by resistances, all of which make its calculation complex.

The following diagram can be utilized for avoiding complicated calculations. It allows the user to quickly and reliably determine water column loses in mm.

The chart below is valid for drinking water (10°C).



4.10 BRACKET DISTANCES

SURPRESS offer two mounting options to clamp pipes to ceilings, walls or floors. By setting fixation and floating points, the elongation of the pipe resulting from temperature fluctuations is guided in the desired direction.

Pipe clamps must not be applied to fittings. Fixing floating points must occur so that the elongation of the pipe is not hindered.

Unless otherwise stated, clamp intervals (Fig 3.16) can be used as guidelines for SUREPRESS.

DN	d x s in mm	Distance in M to AS 3500
15	18 x 1	1.50
20	22 x 1,2	1.50
25	28 x 1,2	2.00
32	35 x 1,5	2.50
40	42 x 1,5	2.50
50	54 x 1,5	3.00
65	76,1 x 2	3.00
80	88,9 x 2	3.00
100	108 x 2	3.00
150	168 x 2	4.00

Fig3.16

4.11 ELECTRICAL HEAT TRACING

When using electrical heat tracing systems in connection with SUREPRESS 316L the temperature of the inner pipe wall must not exceed 60° Celsius. A temporary temperature increase to 70° C (no more than 1 hour per day) is permitted for the purpose of thermal disinfection. For systems equipped with an

accumulation safety device or backflow preventer, an impermissible increase in pressure, because of heating is to be avoided.



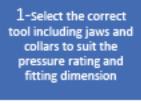
4.13 CREATING A RELIABLE SUREPRESS CONNECTION

Transport and storage

In transport and storage on site, SUREPRESS press fittings and tubes are to be protected against damage, moisture, UV-radiation, soil, swarf and other building materials. Store the tubes and fittings in a dry environment, not on the ground and do not rest or place heavy objects on them.

1234

Completing a Joint



2-Cut the tube to length remembering to take into account the insertion depth of the fitting

3-Deburr the tube on the inside and outside of the cut to remove any burrs that mey damage the o-ring on inserion 4-Witness mark the tube with a waterproof felt pen using the depth gauge or measurement of the insertion

6-select the correct press jaw according to the fitting dimension and check the fitting has not moved by inspecting the witness mark

for any signs of damage. Is the O-ring the correct material for the application?

7-Make sure the jaw

is lubricated and not dry. Open the jaw and

apply to the fitting

making sure the fitting

is inserted into the

groove of the jaw,

intitiat the press by

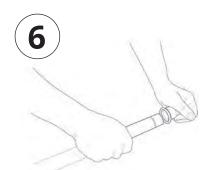
pressing the start

button for 3 seconds

5-Inspect the O-ring

8-Once the cycle is complete, remove the jaw/collar and inspect the join for any defects. Check the witness mark is aligned with the end of the fitting







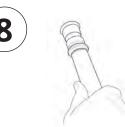


Fig 3.17

4.12 CHOOSING THE CORRECT TOOL

There are several steps involved in choosing the correct SUREPRESS tool for your installation. SUREPRESS offer 3 main tooling options with varying capabilities. Answering the questions in the chart below will begin the process.

Media Suitability

SUREPRESS 316L STAINLESS STEEL IS SUITABLE FOR A WIDE VARIETY OF MEDIA. PLEASE CONTACT SUREPRESS FOR ASSISTANCE IN SELECTING THE BEST PERFORMING O-RING AND TOOLING FOR YOUR INSTALLATION.

Press Tool Training

SUREPRESS CAN OFFER FULL ON SITE PRESS TOOL TRAINING BY A FULLY TRAINED EXTERNAL CUSTOMER SERVICE REPRESENTATIVE.

- **1.** What is the required working pressure and media?
- **2.** What Size Pipe will I be installing?
- 3. Which Profile Jaws & collars do I need?

Once the questions are answered and the tooling is identified, use the following matrix to select all the required tool parts to complete your Surepress piping installation. If in doubt, please contact SUREPRESS who

* Maximum Working Pressures

*THE MAXIMUM WORKING PRESSURE IN THIS DOCUMENT IS TO BE USED AS A GUIDE ONLY. PLEASE CONTACT SUREPRESS FOR MEDIA SPECIFIC WORKING PRESSURES. FULL SPECIFICATIONS AND INSTRUCTIONS ARE AVAILABLE VIA OUR EXPERIENCED TEAM.



M PROFILE - Standard Pressure

Select Tool:		Select Adaptor:	Select Jaw or Collar:		
тс	OOL	ADAPTOR	JAW		ITEM
	AC203XL	No Adaptor required	15mm	M profile jaw	M15
			22mm	M profile jaw	M22
			28mm	M profile jaw	M28
			35mm	M profile jaw	M35
AC203		ADAPTOR		COLLAR	ITEM
		42 - 54 Adaptor	42mm	M profile collar	M42
		ZB203	54mm	M profile collar	M54
		76 - 89 Adaptor	76mm	M profile collar	M76.1
		ZB221	89mm	M profile collar	M88.9
		108mm Stage 1 ZB221	100	M nyafila asllay	N44.00
		108mm Stage 2 ZB222	108mm	M profile collar	M108
ACO403		No Adaptor required	168mm	M profile collar	168.3

M PROFILE - High Pressure

	Select Tool:		Select Adaptor:	Select Jaw or Collar:		
	TOOL		ADAPTOR	COLLAR		ITEM
ı		AC203XL	28 - 54 Adaptor ZB203	28mm	M profile HP collar	HP 28
	A C 2 A 2			35mm	M profile HP collar	HP 35
	AC203			42mm	M profile HP collar	HP 42
				54mm	M profile HP collar	HP 54
			42 - 54 Adaptor	76mm	M profile HP collar	HP 76.1
			ZB203	89mm	M profile HP collar	HP88.9
ACO403		108mm Stage 1 ZB221	108mm	M profile collar	M108	
			108mm Stage 2 ZB222	100111111	w prome conar	101108



Impressive Piping By All Measures



