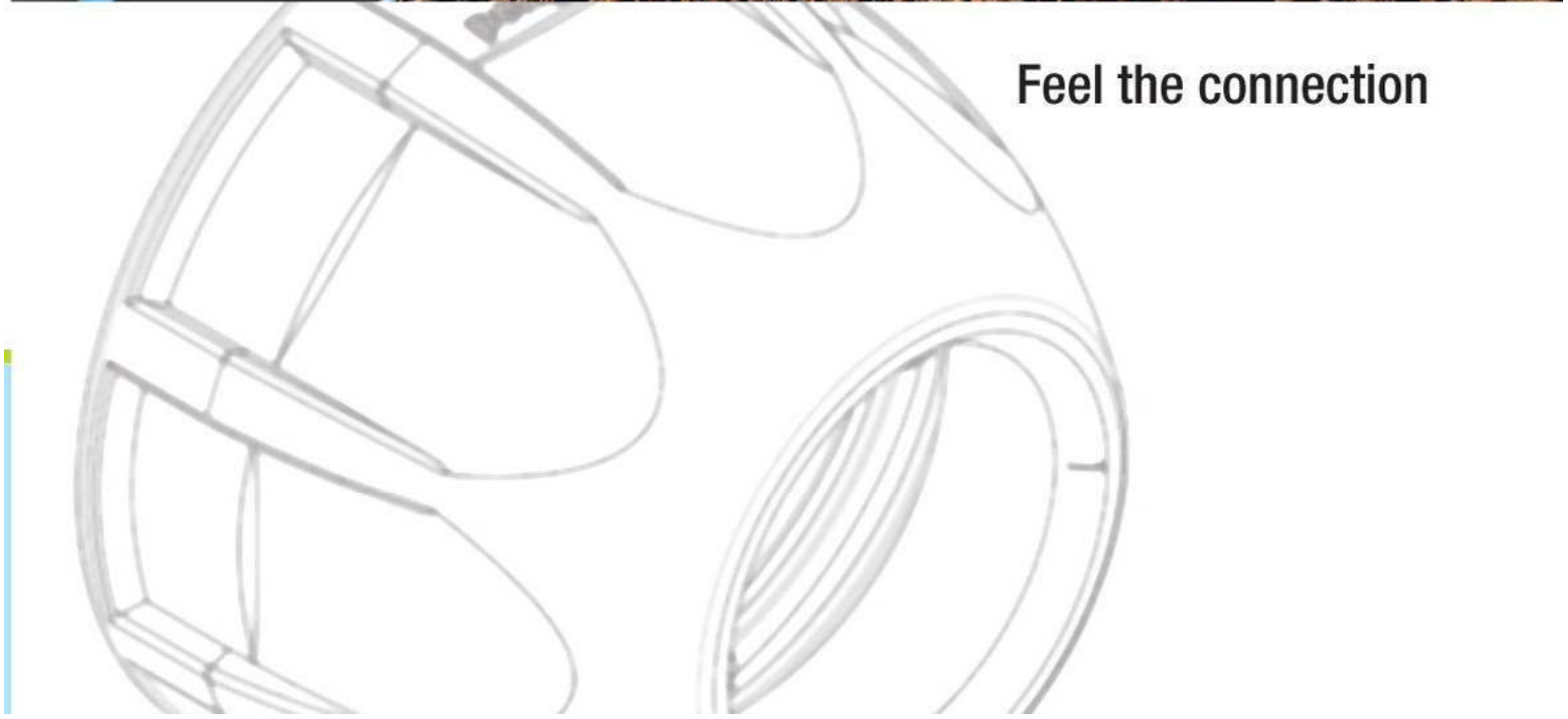


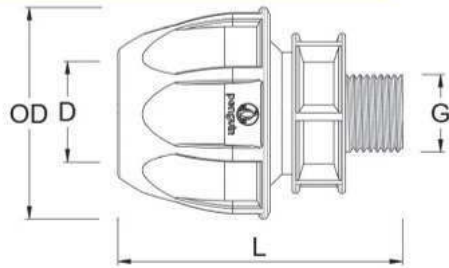
SMART SERIES
MECHANICAL JOINTING SYSTEM



Feel the connection



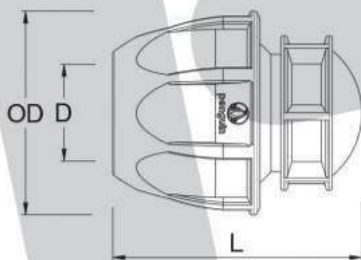
penguin SMART SERIES MECHANICAL JOINTING SYSTEM



MALE THREADED ADAPTOR **M.T.A**

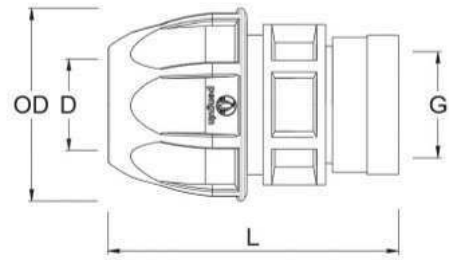
size D(mm) x G(inch)	L (mm)	OD (mm)	WEIGHT (kg)
20 x 1/2"	69	47	0.038
20 x 3/4"	69	47	0.054
25 x 1/2"	74	55.5	0.052
25 x 3/4"	75	55.5	0.054
25 x 1"	78	55.5	0.056
32 x 1/2"	82	65.6	0.080
32 x 3/4"	82	65.6	0.080
32 x 1"	86	65.6	0.084
*40 x 1"	102	80	0.143
*40 x 1 1/4"	102	80	0.145
*40 x 1 1/2"	117	80	0.145
*50 x 1 1/4"	117	94	0.237
*50 x 1 1/2"	117	94	0.215
*50 x 2"	119	94	0.248
*63 x 1 1/2"	123	112	0.435
*63 x 2"	127	112	0.435
*63 x 2 1/2"	127	112	0.435

* BSP Taper Male Threaded



END CAP **E.C**

size D(mm)	L (mm)	OD (mm)	WEIGHT (kg)
20	94	47	0.036
25	100	55.5	0.052
32	123	65.6	0.082
40	150	80	0.145
50	170	94	0.211
63	196	112	0.342

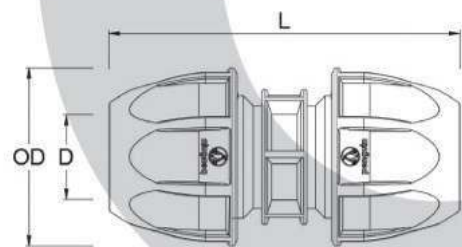


FEMALE THREADED ADAPTOR **F.T.A**

size D(mm) x G(inch)	L (mm)	OD (mm)	WEIGHT (kg)
20 x 1/2"	70	47	0.042
20 x 3/4"	72	47	0.044
25 x 1/2"	75	55.5	0.057
25 x 3/4"	76	55.5	0.058
25 x 1"	79	55.5	0.070
32 x 3/4"	85	65.6	0.095
32 x 1"	89	65.6	0.096
*40 x 1"	104	80	0.163
*40 x 1 1/4"	104	80	0.176
*40 x 1 1/2"	104	80	0.180
*50 x 1 1/4"	125	94	0.248
*50 x 1 1/2"	125	94	0.249
*63 x 2"	153	112	0.447

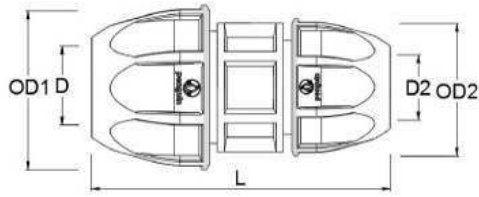
* Come With Reinforced Stainless Steel Ring Cap

* BSP Parallel Female Threaded



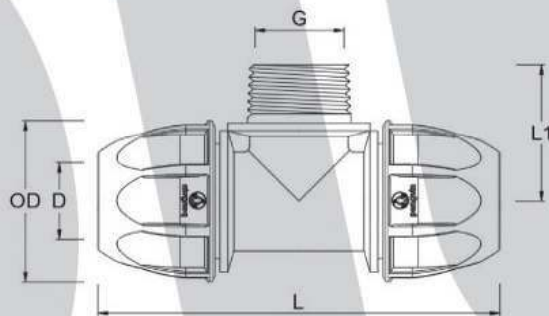
STRAIGHT COUPLER **S.C**

size D x D(mm)	L (mm)	OD (mm)	WEIGHT (kg)
20 x 20	94	47	0.069
25 x 25	100	55.5	0.090
32 x 32	123	65.6	0.152
40 x 40	150	80	0.256
50 x 50	170	94	0.401
63 x 63	196	112	0.639



REDUCING COUPLER **R.C**

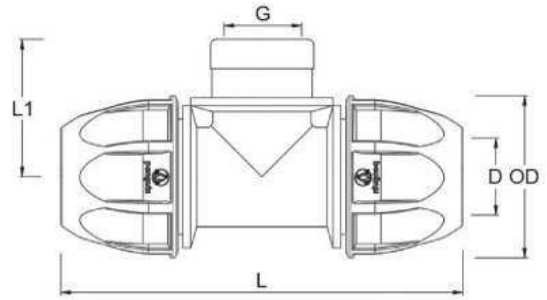
size D1 x D2(mm)	L (mm)	OD1 (mm)	OD2 (mm)	
25 x 20	97	55.5	47	0.086
32 x 20	112	65.6	47	0.09
32 x 25	113	65.6	55.5	0.118
40 x 20	118	80	47	0.130
40 x 25	120	80	55.5	0.186
40 x 32	138	80	65.6	0.193
50 x 20	135	94	47	0.215
50 x 25	135	94	55.5	0.262
50 x 32	159	94	65.6	0.267
50 x 40	161	94	80	0.293
63 x 25	172	112	55.5	0.424
63 x 32	166	112	65.6	0.421
63 x 40	172	112	80	0.466
63 x 50	185	112	94	0.521



MALE TEE **M.T**

size D(mm) x G(inch)	L (mm)	L1 (mm)	OD (mm)	WEIGHT (kg)
20 x 1/2"	120	47	47	0.089
20 x 3/4"	120	47	47	0.090
25 x 1/2"	134	50	55.5	0.130
25 x 3/4"	134	50	55.5	0.139
25 x 1"	134	50	55.5	0.149
32 x 3/4"	160	59	65.6	0.190
32 x 1"	160	59	65.6	0.198
*40 x 1"	189	62	80	0.320
*40 x 1 1/4"	189	65	80	0.348
*50 x 1 1/4"	220	77	94	0.540
*50 x 1 1/2"	220	77	94	0.545
*63 x 1"	262	92	112	0.830
*63 x 2"	262	92	112	0.880

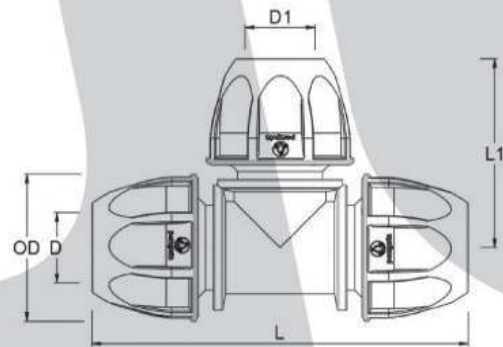
* BSP Taper Male Threaded



FEMALE TEE **F.T**

* Come With Reinforced Stainless Steel Ring Cap
* BSP Parallel Female Threaded

size D(mm) x G(inch)	L (mm)	L1 (mm)	OD (mm)	WEIGHT (kg)
20 x 1/2"	120	47	47	0.094
20 x 3/4"	120	47	47	0.095
25 x 1/2"	134	50	55.5	0.139
25 x 3/4"	134	50	55.5	0.140
25 x 1"	134	50	55.5	0.153
32 x 3/4"	160	59	65.6	0.198
32 x 1"	160	59	65.6	0.200
*40 x 1"	187	65	80	0.353
*40 x 1 1/4"	187	65	80	0.358
*40 x 1 1/2"	187	65	80	0.366
*50 x 1 1/4"	220	78	94	0.536
*50 x 1 1/2"	220	78	94	0.536
*50 x 2"	221	78	94	0.550
*63 x 2"	262	90	112	0.925

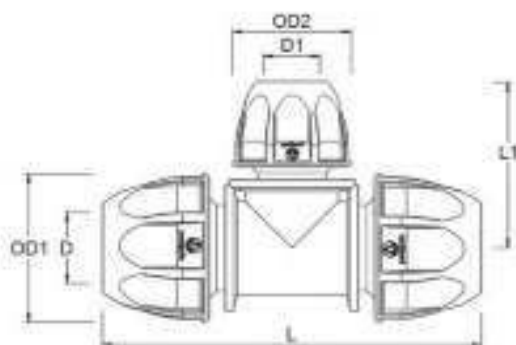


EQUAL TEE **E.T**

size D(mm) x D1(mm)	L (mm)	L1 (mm)	OD (mm)	WEIGHT (kg)
20 x 20	120	63	47	0.116
25 x 25	134	67	55.5	0.159
32 x 32	160	80	65.6	0.236
40 x 40	187	96	80	0.427
50 x 50	220	112	94	0.651
63 x 63	262	132	112	1.098

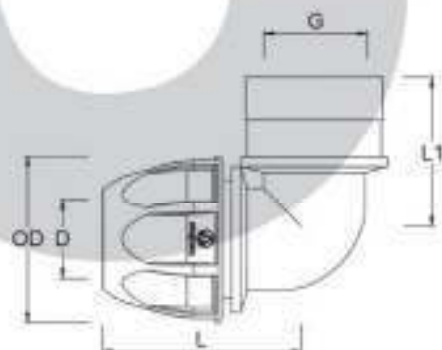


penguin SMART BY Polyware™



REDUCING TEE **R.T**

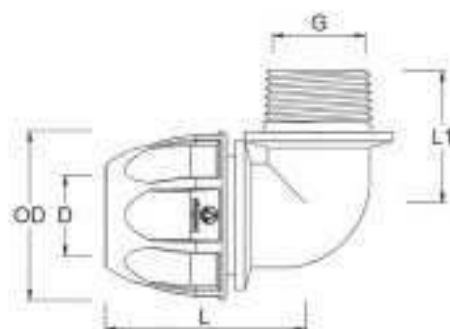
size D1 x D2(mm)	L (mm)	L1 (mm)	OD1 (mm)	OD2 (mm)	WEIGHT (kg)
25 x 20	134	67	55.5	47	0.100
32 x 20	160	75	65.6	47	0.135
32 x 25	160	77	65.6	55.5	0.150
40 x 25	187	83	80	55.5	0.210
40 x 32	187	87	80	65.6	0.250
50 x 20	220	95	94	47	0.310
50 x 25	220	100	94	55.5	0.355
50 x 32	220	102	94	65.6	0.400
50 x 40	220	110	94	80	0.430
63 x 25	262	262	112	55.5	0.520
63 x 32	262	262	112	65.6	0.532
63 x 40	262	270	112	80	0.540
63 x 50	262	275	112	94	0.615



FEMALE ELBOW 90° **F.E**

* Come With Reinforced
Stainless Steel Ring Cap
* BSP Parallel Female Threaded

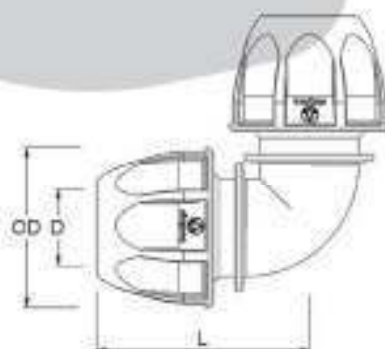
size D(mm) x G(inch)	L (mm)	L1 (mm)	OD2 (mm)	WEIGHT (kg)
20 x 1/2"	59	43	47	0.062
20 x 3/4"	59	43	47	0.063
25 x 1/2"	67	50	55.5	0.063
25 x 3/4"	67	50	55.5	0.092
25 x 1"	67	51	55.5	0.090
32 x 3/4"	83	60	65.6	0.138
32 x 1"	83	63	65.6	0.140
40 x 1"	93	67	80	0.245
40 x 1 1/4"	93	67	80	0.245
50 x 1 1/4"	111	77	94	0.363
50 x 1 1/2"	111	77	94	0.370
63 x 2"	132	86	112	0.576



MALE ELBOW 90° **M.E**

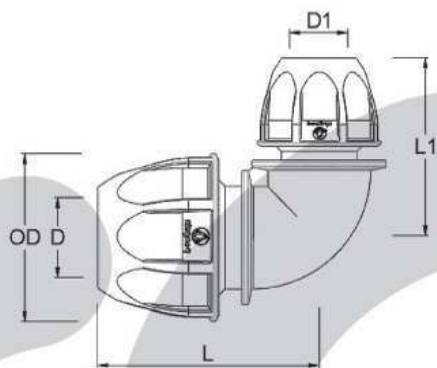
* BSP Taper Male
Threaded

size D(mm) x G(inch)	L (mm)	L1 (mm)	OD2 (mm)	WEIGHT (kg)
20 x 1/2"	59	42	47	0.055
20 x 3/4"	59	42	47	0.055
25 x 1/2"	67	51	55.5	0.063
25 x 3/4"	67	55	55.5	0.082
25 x 1"	67	55	55.5	0.090
32 x 3/4"	83	60	65.6	0.120
32 x 1"	83	60	65.6	0.125
40 x 1"	93	65	80	0.226
40 x 1 1/4"	93	65	80	0.226
40 x 1 1/2"	93	65	80	0.232
50 x 1 1/4"	111	77	94	0.412
50 x 1 1/2"	111	77	94	0.415
63 x 2"	132	89	112	0.564



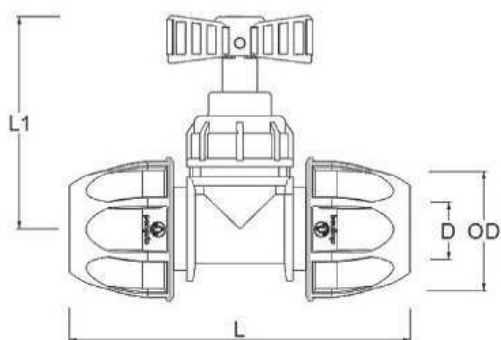
EQUAL ELBOW 90° **E.E**

size D(mm) x D(mm)	L (mm)	OD (mm)	WEIGHT (kg)
20 x 20	60	47	0.078
25 x 25	67	55.5	0.101
32 x 32	83	65.6	0.174
40 x 40	93	80	0.293
50 x 50	111	94	0.456
63 x 63	132	112	0.714



REDUCING ELBOW R.E

size D(mm) x D1(mm)	L (mm)	L1 (mm)	OD (mm)	WEIGHT (kg)
25 x 20	67	60	55.5	0.086
32 x 20	83	60	65.5	0.090
32 x 25	83	67	65.5	0.118
50 x 25	111	67	94	0.262
50 x 32	111	83	94	0.267



STOP TAP S.T

size D(mm) x D1(mm)	L (mm)	L1 (mm)	OD (mm)	WEIGHT (kg)
20 x 20	120	109	47	0.056
25 x 25	134	111	55.5	0.067
32 x 32	160	118	65.6	0.101



penguin SMART BY Polyware™

INSTALLATION INSTRUCTION



1. Cutting the pipe

Cut the pipe using pipe cutter for remove the damage profile surface end of the pipe to ensure end of pipe is even and flat.



2. Pipe position

Unscrew the nut enough showing the 2 threads for giving the tolerance and ready for pipe inserting.



3. Pipe insertion

Insert the pipe by pushing the pipe into the fittings until the end of the pipe reach to the stopper and cannot be push anymore.



4. Tightening the nut

Carefully tighten the nut by twisting the nut clockwise. Only from 20mm -32 mm fitting size can tighten by hand.



5. Fully installed

The whole installation process is complete. Once the pipe cannot be pulled, the fittings assembly is fine.

Reminder:-

- Make sure the pipe size matching with the compression fittings size.
- Only allowable for PE and PPR jointing.
- Make sure the end of the pipe flat and clean for maximum jointing performance.

PRODUCT SPECIFICATION



Why PENGUIN?

- User and environmental friendly
- Reduce maintenance and handling cost.
- Harmless to human and environment.

Product Features

- Fully new version of appearance and mechanical system.
- Light weight & easy handling
- Corrosion resistant, harmless and no chemical reaction.
- 2.5 times safety factor performance.

Installation Method

- Mechanical

Application

- House connection & service lines
- Water distribution system
- High end irrigation
- Industrial
- Mining

Feel The Connection

- Ergonomics structure gives comfortable feels during installation handling.
- Minimum strength required for tightening installation by user.
- No sharp edges and not harmful that cause injury to user.
- Reduce the installation difficulties by using smooth fit & twist concept.

PIPE SUITABILITY

Polyethylene Pipe PE 80 & PE 100 (ISO4427 & MS1058) & AS/NZS4130

TEST STANDARD

ISO17885, ISO3458, ISO3459, ISO3501, ISO3503

Threaded Standard: BS21 ISO7

Product Description	Size(mm)	Max Operating Pressure (PN) at temperature 20°C	Reference Test Standards
Mechanical Compression Fittings	20 - 63	16	ISO17885 ISO3458, ISO3459 ISO3501, ISO3503 BS21, ISO7

Industrial Designed Pending

02.18

www.polyware.com.my

