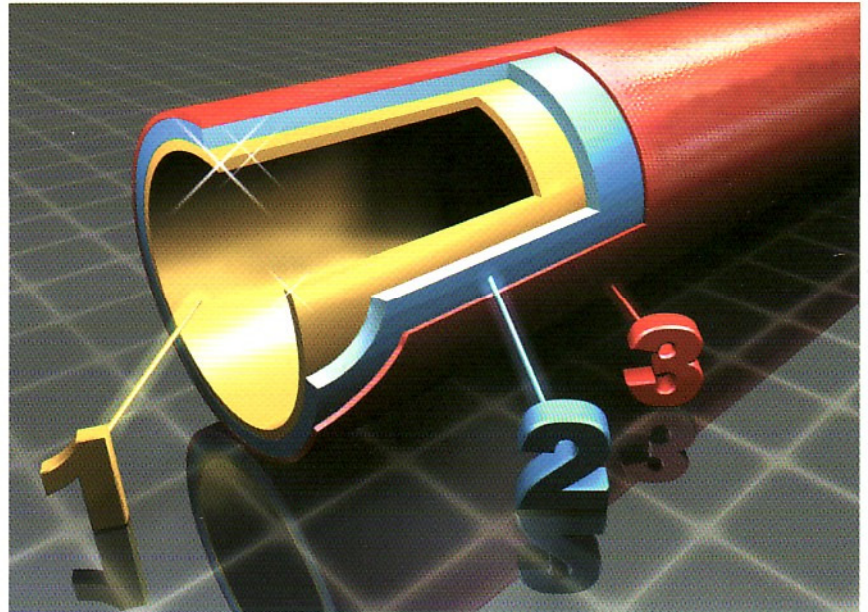


**PAM-GLOBAL® S**  
**PAM-SMU® S**  
**PAM-ENSIGN® S**

Range of diameters - DN 40 to 600

Pipes

- 1** New epoxy-resin inner coat with optimised properties (130 µm)
- 2** Cast iron De Lavaud process
- 3** Outer coat (acrylic primer 40 µm)

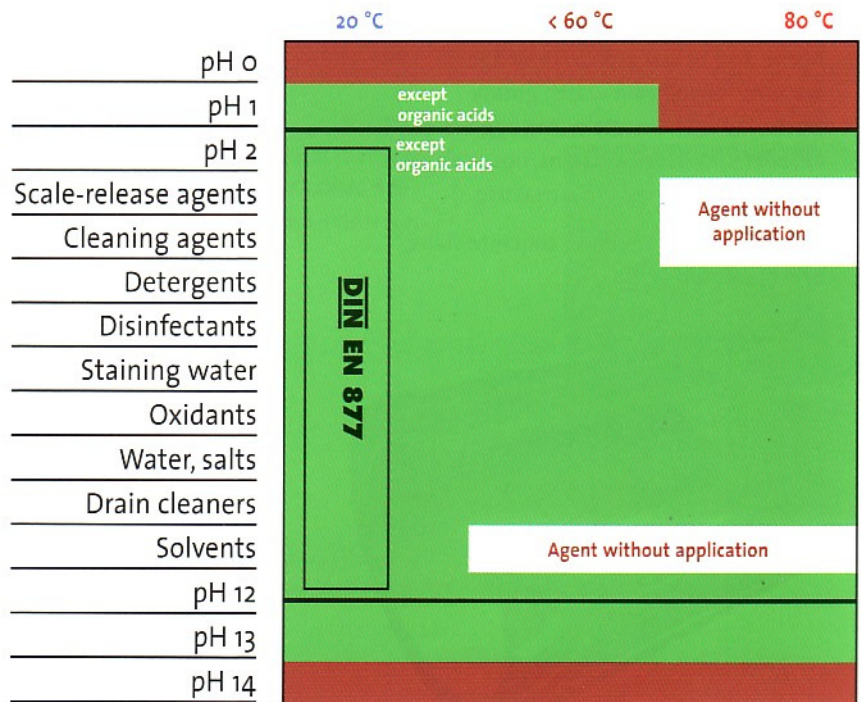


The interior surfaces of PAM-GLOBAL® S pipes are optimally protected against chemical and mechanical influences as a result of a newly refined coating process on a modified epoxy-resin basis. Moreover, the new extremely smooth surface has improved the flow proper-

ties and prevents the formation of incrustations and deposits. The inner coating of the cast pipes and fittings has been co-ordinated in an ideal manner so that no differences can arise in the durability values of PAM-GLOBAL® S drainpipes.

The coating of PAM-GLOBAL® S pipes and fittings by far exceed the requirements stipulated in DIN EN 877.

The most important resistance properties of the inner lining of PAM-GLOBAL® S pipes and fittings for domestic applications in intermittent use. PAM-GLOBAL® S Plus is available for commercial applications and to drain off particularly aggressive waste water (after referring to the Technical Consultant Service).

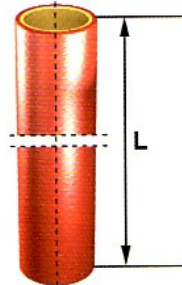




Socketless pipe (L= 3 m)



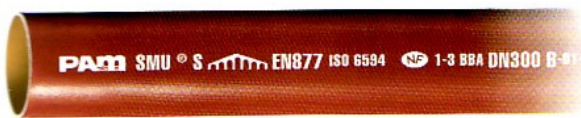
Pipe marking (example for a pipe of DN 100)



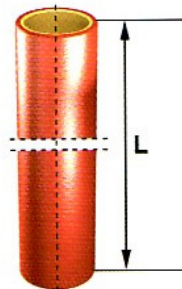
L= 3000 mm			
DN	DE*	Product code	Weight
40	48	see Pam-SMU® S	9.40
50	58	156361	13.00
70	78	156454	17.70
75	83	156550	18.30
100	110	156561	25.20
125	135	156734	35.40
150	160	156825	42.20
200	210	156949	69.30
250	274	157048	99.80
300	326	157113	129.70
400	429	157171	177.70
500	532	157187	244.90
600	635	157203	321.90

\* External Diameter

Socketless pipe (L= 3 m)



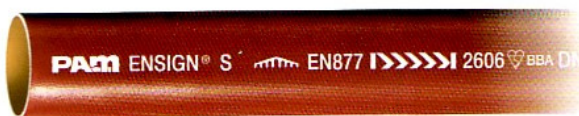
Pipe marking (example for a pipe of DN 300)



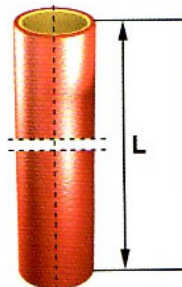
L= 3000 mm			
DN	DE*	SMU reference	Weight
40	48	156342	8.90
50	58	156360	12.50
70	78	see Pam-GLOBAL® S	
75	83	156452	18.30
100	110	156560	24.30
125	135	156733	34.30
150	160	156824	40.90
200	210	156948	67.40
250	274	157047	97.30
300	326	157112	126.80

\* External Diameter

Socketless pipe (L= 3 m)



Pipe marking (example for a pipe of DN 300)



L= 3000 mm			
DN	DE*	Product code	Weight
50	58	156363	13.00
70	78	156455	19.00
75	83	see Pam-SMU® S	
100	110	156563	25.50
125	135	156736	35.50
150	160	156827	43.00
200	210	156951	69.30
250	274	157049	99.80
300	326	157114	129.70

\* External Diameter

**Protection of the pipe cut ends**

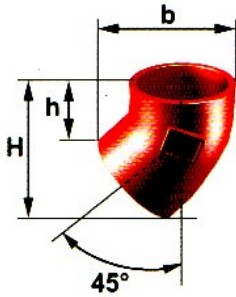
In countries or areas where aggressive flushing waters could be used (e. g. sea water for toilet,...), after cutting of pipes, it is recommendable to protect the sections by applying a layer from

ENDOKOTE-Protection kit, reference 170897 made of 85 gr syringe (a resin and a hardnerbased), red color. Number of the DN 100 pipe cut ends that enable to cover with a kit : 20.



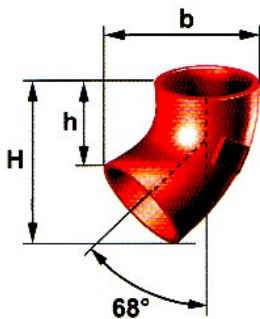
## Bends

### 45° bends



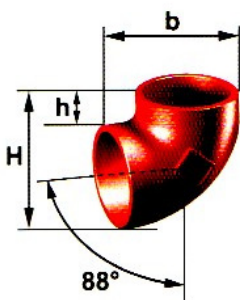
DN	Product code	b	H	h	Weight
40	156348	72	94	60	0.35
50	156384	84	106	65	0.55
70	155780	108	129	74	0.90
75	156476	112	132	73	0.85
100	156593	142	158	80	1.57
125	156756	171	184	89	2.12
150	156850	199	210	97	3.19
200	156970	256	262	113	5.25
250	157069	324	319	125	10.00
300	157134	387	380	149	18.82
400	157175	540	573	270	34.34
500	157190	678	730	350	64.00
600	175540	788	821	370	93.00

### 68° bends



DN	Product code	b	H	h	Weight
50	156382	104	123	70	0.75
70	155779	123	139	67	1.10
75	156474	131	149	72	1.05
100	156591	159	176	74	1.80
125	156754	188	205	80	3.00
150	156847	219	237	89	4.10
200	156968	277	295	99	7.78
250	157067	343	358	104	14.65
300	157132	406	423	121	20.00

### 88° bends

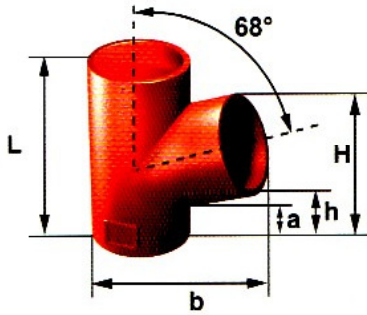


DN	Product code	b	H	h	Weight
40	156346	90	91	43	0.50
50	156379	104	107	49	0.80
70	155778	130	132	54	1.40
75	156471	138	140	57	1.20
100	156588	166	169	59	2.22
125	156752	194	197	62	2.85
150	156844	227	230	70	4.34
200	156966	267	291	81	8.10
250	157065	360	363	89	13.50
300	157130	427	431	105	27.67



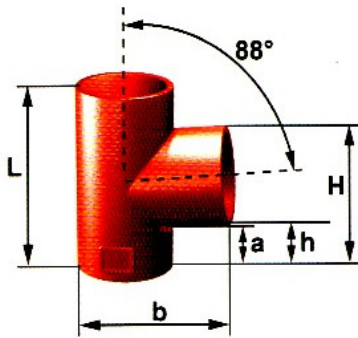
**Branches**

**68° single branches**



DN	dn	Product code	L	b	H	h	a	Weight
50	50	156433	145	118	117	65	37	1.10
70	50	155788	145	133	115	62	36	1.30
	70	155805	170	146	143	71	40	1.70
75	50	156488	155	140	122	69	42	1.40
	75	156542	180	158	149	72	37	2.35
100	50	156616	155	168	123	69	43	1.80
	70	155830	180	180	150	79	43	2.40
	75	156623	185	186	155	79	44	2.40
	100	156699	220	195	189	87	50	2.95
125	100	156773	225	222	190	88	50	3.80
	125	156811	225	235	220	95	50	4.45
150	100	156877	235	243	194	92	55	4.90
	125	156881	265	262	226	101	56	6.50
	150	156929	295	276	256	108	55	6.65
200	150	156987	310	329	263	114	62	10.20
	200	157027	365	352	321	126	63	13.20
250	200	157076	390	420	328	132	68	18.48
	250	157104	460	452	408	154	77	20.10
300	300	157167	545	544	480	178	80	34.50

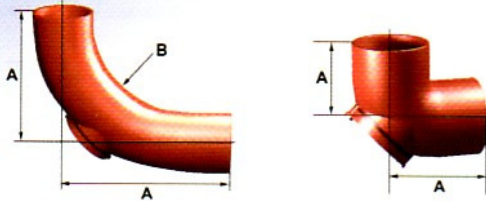
**88° single branches**



DN	dn	Product code	L	b	H	h	a	Weight
50	50	156431	145	110	111	53	31	1.10
70	50	155787	160	132	117	59	43	1.40
	70	155804	180	135	139	61	38	1.70
75	50	156486	160	132	117	59	42	1.50
	75	156538	180	138	140	57	37	1.95
100	50	156613	170	161	127	69	45	2.25
	70	156620	190	166	145	67	45	2.40
	75	155829	190	166	145	62	40	2.55
	100	156695	220	172	174	64	41	2.90
125	50	156768	180	188	131	73	51	2.80
	70	155878	200	194	150	72	48	3.40
	100	155880	235	199	184	74	48	4.00
	125	156809	260	205	209	74	48	4.50
150	50	156870	200	221	134	76	51	3.90
	70	155909	215	221	159	81	53	4.80
	75	156872	220	221	161	78	55	4.95
	100	156874	245	227	190	80	52	4.90
	125	155913	275	232	220	85	56	5.70
	150	156925	300	237	243	83	55	6.50
200	100	156980	270	282	206	96	64	9.80
	200	157024	365	388	296	86	67	11.10
250	250	157102	455	366	375	101	77	18.50
300	300	157165	530	433	437	111	87	34.00



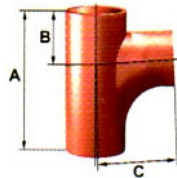
**Bends – Short & Long Radius Door Back**



DN	Product code	A	Weight
<b>88° Bend – Short Radius Door Back – EFO05</b>			
70	156472	90	1.80
100	156589	110	3.30
150	156845	145	6.10

DN	Product code	A	B	Weight
<b>88° Bend – Long Radius Door Back – EFO5L</b>				
100	156607	269	180	1.80

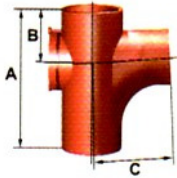
**Branches – Single equal & Unequal**



See BS EN 12056-2: 2000 for applications.

DN	Product code	A	B	C	Weight
<b>88° Single Branch – Radius Curve – EFO6R</b>					
70x70	156539	210	80	130	2.20
100x50	156611	204	90	120	2.40
100x70	156612	221	90	142	2.70
100x100	156696	270	102	150	3.50
150x100	156869	300	117	202	7.60
150x150	156926	400	140	260	12.50
200x150	156985	428	157	283	13.00
200x200	157025	478	182	293	21.00

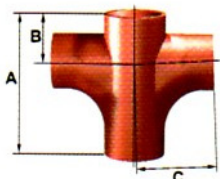
**Branches – Single equal & Unequal**



See BS EN 12056-2: 2000 for applications.

DN	Product code	A	B	C	Weight
<b>88° Branch with Access – Radius Curve – EFO7R</b>					
70x70	156539	210	80	130	2.50
100x70	156621	221	90	142	3.50
100x100	156697	270	102	150	4.30
150x100	156875	300	117	202	10.40
150x150	156927	400	140	260	13.90

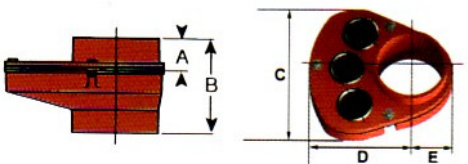
**Branches – Double**



See BS EN 12056-2: 2000 for applications.

DN	Product code	A	B	C	Weight
<b>88° Double Branch – Radius Curve – EFO10R</b>					
100x100	157643	270	102	150	4.20
150x100	156862	300	115	200	10.90

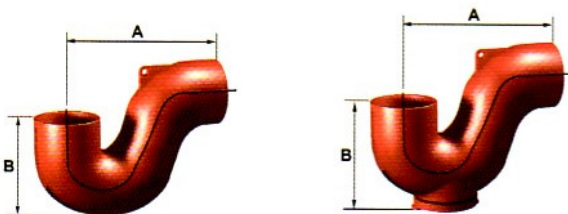
**Multi Manifold**



DN	Product code	A	B	C	D	E	Weight
<b>Manifold Connector – EFO94</b>							
100	175626	43	125	200	142	62	3.20
150	175629	70	165	290	184	81	6.10

For installation, see also pages 82 and 83.

**Traps**



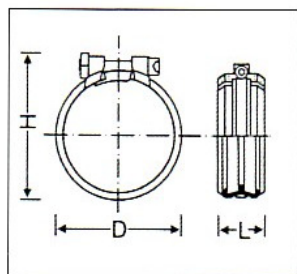
DN	Product code	A	B	Weight
<b>Traps – Plain – EFO34</b>				
100	156666	255	160	1.80
<b>Traps – Plain with Access Bottom – EFO37</b>				
50	156419	160	115	2.00
70	156518	200	138	2.70
100	156667	255	175	5.20
150	156911	350	240	12.10



# PAM-GLOBAL® S PAM-SMU® S

## Couplings

### PAM-GLOBAL® RAPID-S couplings



DN	Product code		D	H≈ Largest dimension after installation	L≈	Tightening torque [Nm]	Weight
	- S	- Inox					
40	157586	157587	53	64	41	block clamp	0.07
50	157589	157591	70	80	40		0.10
70	155794	155795	90	100	40		0.12
75	157594	157596	90	100	40		0.13
100	157598	157600	125	135	46		0.18
125	157602	157604	147	162	55		0.30
150	157606	157608	172	187	55		0.35
200	157610	157612	223	240	70		0.65
250	-	157615	288	306	115		0.70
300	-	157618	336	351	115		0.90

Profile clamp made of stabilized chrome steel, Material No. 1.4510/11 as defined in DIN 17 440/41. Closure part with only one screw. Clamping heads made of Material No. 1.4301. Galvanized screw, washer and square

nut, yellow chromatised. Complete with inserted EPDM sealing collar that is resistant to ageing and boiling water. Also available with NBR sealing collar for waste water contaminated with oil and petrol.

Note : a specific system exists for DN 70 - DN 75 connection, see page 70

#### SPECIAL DESIGN:

**PAM-GLOBAL® RAPID-INOX couplings**  
DN 50-200  
Approval No. Z - 42.5 - 298

**PAM-GLOBAL® RAPID-INOX couplings**  
Made of special steel  
Material Group W5 = Material 1.4571 = AISI 316  
DN 50-200: closure part with one screw  
DN 250-300: closure part with two screws

Profile clamp and closure parts made of austenitic chrome-nickel steel, Material No. 1.4571 A4 as defined in DIN EN 10088.

#### Identifying feature:

**W5** identification on the profile clamp.



For pipelines that are exposed to the weather, e.g. for bridge building or open multi-storey car parks, in conjunction with PAM-GLOBAL® B System. Likewise, without additional corrosion protection, ideal for burying in the ground. Friction-locked longitudinal adhesion is maintained up to 0.5 bar with up to DN 200.

See page 78 for installation instructions

All dimensions are in mm and nominal weights in kg