



PLASTICA ALFA
INNOVATION & WATER TECHNOLOGIES

BLACK LINE

Raccordi a compressione
Compression fittings

Technical Catalogue



I **raccordi a compressione Black Line**, che Plastica Alfa produce **da circa 25 anni**, sono conosciuti in tutto il mondo per il loro **ottimo rapporto qualità-prezzo** e la loro **lunga vita di servizio**. Vengono impiegati per collegare tubi in polietilene (PEBD, PEMD e PEAD) e anche in PPR per la distribuzione di fluidi in pressione (fino a PFA 16) e non. In particolare sono usati per il trasporto di acqua potabile negli acquedotti e negli impianti civili, nell'irrigazione, negli impianti antincendio, negli impianti geotermici, per il convogliamento di acque reflue e industriali, per la distribuzione di aria compressa.

Plastica Alfa has been manufacturing **Black Line compression fittings** for about **25 years**, known worldwide for the **excellent value for money and long service life**. Black Line fittings are used to connect polyethylene (LDPE, MDPE and HDPE) and PPR pipes to supply pressurized (up to PFA 16) and not pressurized fluids. They are especially used for drinking water supply in aqueducts and civil installations, irrigation, firefighting systems, geothermal systems, to convey waste and industrial water, compressed air.



Corpo
Body

Polipropilene nero ad alto impatto stabilizzato UV e con elevata stabilità all'invecchiamento.
High impact black Polypropylene, UV stabilized with long term heat aging.



Anello di spinta
Thrust ring

Polipropilene nero ad alto impatto stabilizzato UV
High impact black Polypropylene, UV stabilized with long term heat aging.



Ghiera
Nut

Polipropilene blu ad alto impatto, stabilizzato UV
High impact Blue Polypropylene stabilized to UV ray exposition



Anello di rinforzo
Reinforcing ring

Acciaio inox "AISI 430"
Stainless steel "AISI 430"



Anello di Graffaggio
Clinching Ring

Resina acetica (POM)
Acetal resin (POM)



Guarnizione
Gasket

Gomma nitrilica nera (NBR)
Black nitrile rubber (NBR)

TEMPERATURA E PRESSIONE D'ESERCIZIO

WORKING TEMPERATURE AND PRESSURE

Ø 16÷110 = 20°C-16bar, 45°C-10bar, 70°C-3bar Ø 3"- 4" Filettato femmina/female threaded = 20°C-10bar, 45°C-6.7bar, 70°C-2bar

PRESSIONE ESERCIZIO AMMISSIBILE PFA (PN) IN BAR

ALLOWABLE OPERATING PRESSURE PFA (PN) IN BAR

Ø 16÷110 = 16 Ø 3"- 4" Filettato femmina/female threaded = 10

PRESSIONE ESERCIZIO MASSIMA AMMISSIBILE PMA IN BAR

ALLOWABLE MAXIMUM OPERATING PRESSURE PMA IN BAR

Ø 16÷110 = 20 Ø 3"- 4" Filettato femmina/female threaded = 12.5

PRESSIONE DI PROVA AMMISSIBILE PER IL SITO (PEA) IN BAR

ALLOWABLE SITE PRESSURE (PEA) IN BAR

Ø 16÷110 = 24 Ø 3"- 4" Filettato femmina/female threaded = 15

IDONEITÀ AL CONTATTO CON ACQUA POTABILE

REGULATIONS FOR DRINKING WATER

DM 174-06/04/2004 (Italy), DM 23/04/2009 e Reg. UE n° 10/2011, W270 and KTW (Germany), ATA (Netherlands), Global Mark (Australia), ACS (France), WRAS (UK).

NORME DI RIFERIMENTO

REFERENCE STANDARDS

Tubi/Pipes: UNI EN 12201, ISO 11922-1, DIN 8074, AS/NZS 4130, BS 6572, BS 6730, ISO 4427, UNI 7990, ISO 12162.

Filetti BSP/BSP Threads: UNI EN 10226 (ISO 7-1), BS 21, AS 1722.1

Filetti NPT/NPT threads: ANSI-ASME B1.20.1

Flange/Flanges: UNI EN1092-1, ISO 7005-1, DIN 2501.1, BS 4504

Tubi scanalati/Grooved pipes (tipo Victaulic/Victaulic type): ANSI/AWWA C 606-87

Prove/Tests: ISO 17885 (ex ISO 14236), DIN 8076-3, AS/NZS 4129, BRL K534/03 -UNI, ISO 3501, ISO 3503, ISO 3458, ISO 3459, VP609

CERTIFICATI DI PRODOTTO

APPROVALS



KIWA
Netherlands and Italy



SABS
South Africa



GOST
Russia



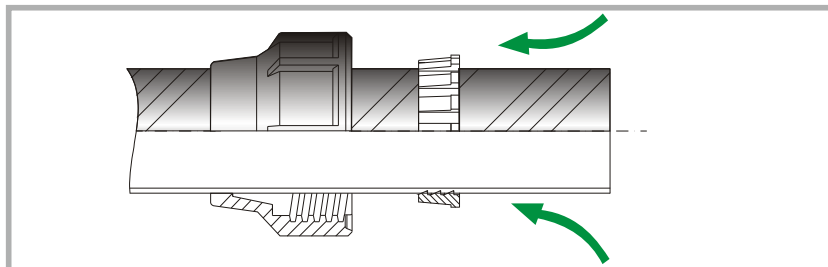
ROMÂNIA
CTPC
Romania



Bulgarkontrola
Bulgaria

Schema di Montaggio

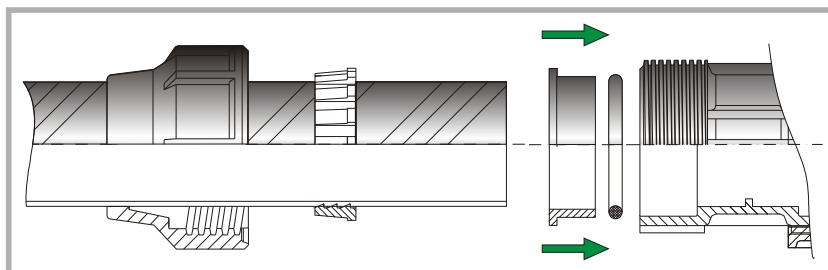
Assembly Instructions



1

Tagliare il tubo ortogonalmente all'asse e smussarlo all'estremità per facilitarne l'inserimento. Inserire la ghiera e l'anello di graffaggio.

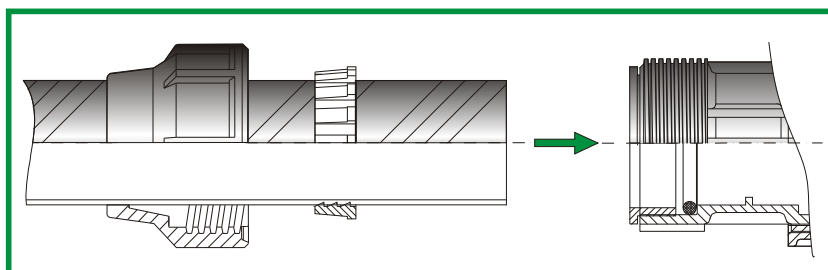
Cut the pipe squarely and chamfer the ends to make the installation easier. Insert the nut and the clinching ring.



2

Assicurarsi che la guarnizione e l'anello di spinta siano inseriti nel corpo del raccordo.

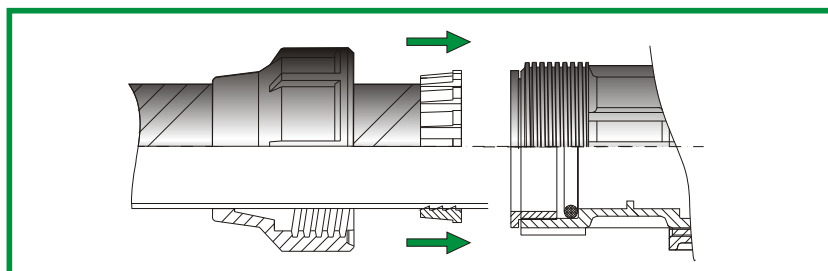
Place the o' ring and the thrust ring in the body of the fitting.



3

Inserire il tubo nel corpo del raccordo fino alla battuta.

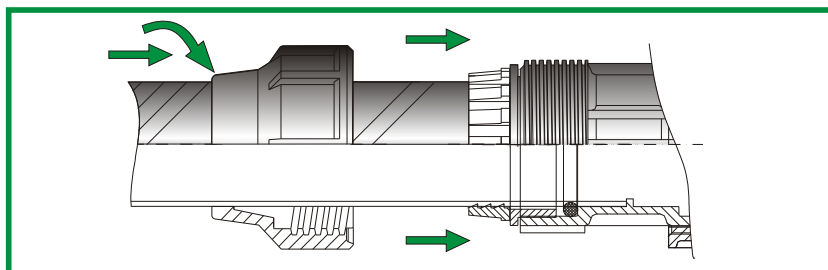
Insert the PE pipe into the body of the fitting and push it to the beat.



4

Spostare l'anello di graffaggio lungo l'asse ed accostarlo all'anello di spinta.

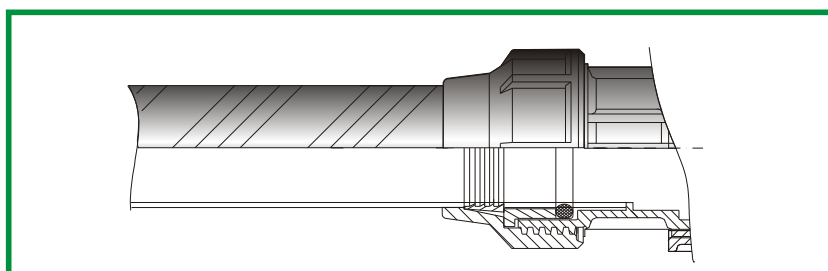
Move the clinching ring and push it against the thrust ring



5

Avvitare la ghiera manualmente quindi utilizzare una chiave di serraggio per completare l'operazione.

Tighten the nut manually first, then using a strap or chain wrench to complete the operation.



6

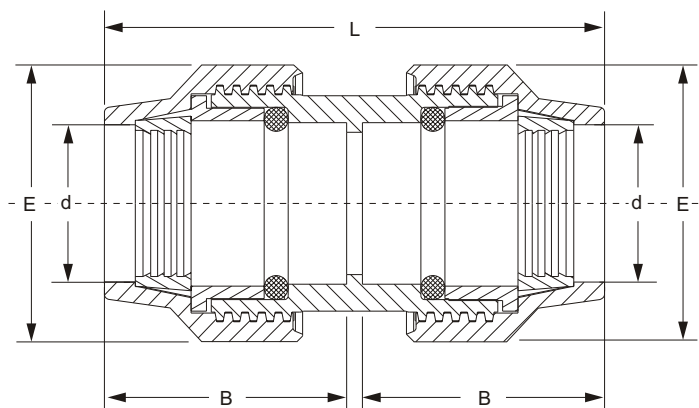
Per un corretto funzionamento si consiglia l'utilizzo di tubi conformi alle norme internazionali.

For the proper functioning, pipes conforming to the international standards are recommended.

Manicotto

Coupling - Manchon - manguito

13810

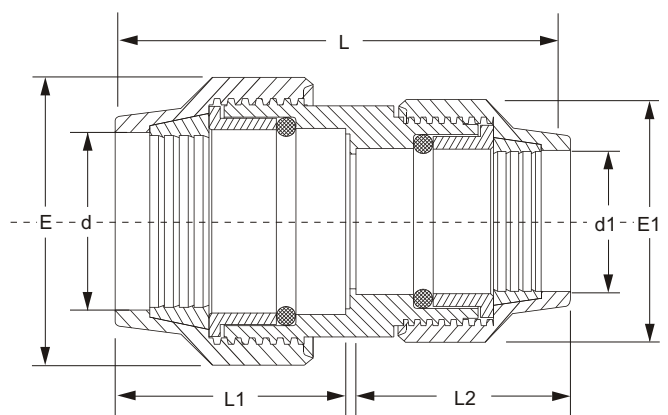


d	E	L	B	Peso/weight (gr)
16	39	86	41	38
20	42.5	87	42	63
25	48.5	94	46	79
32	60	108	53	130
40	72	133	65	232
50	86	152	73	362
63	99	178	87	535
75	118	204	101	797
90	144	256	126	1408
110	169	300	149	2220
125 - PLUS	207,5	506	254	5000

Manicotto ridotto

13820

Reducing Coupling - Manchonreduit - Manguito Reducido

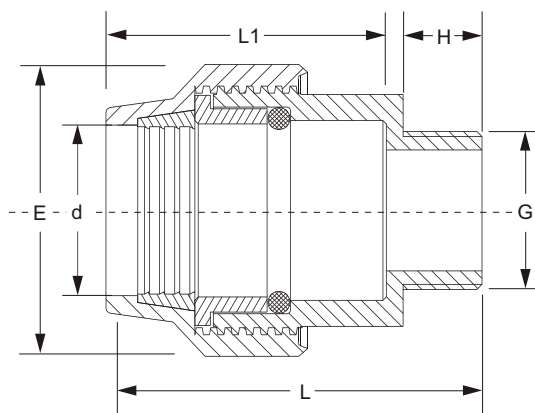


d x d1	E	E1	L	L1	L2	Peso/Weight (gr)
20x16	42.5	39	89	43	45	52
25x16	48.5	39	93	47	45	57
25x20	48.5	42.5	94	47	45	69
32x20	60	42.5	102	55	47	85
32x25	60	48.5	106	55	50	110
40x32	72	60	128	65	60	190
50x32	72	60	139	76	60	266
50x40	86	72	147	76	69	302
63x32	99	60	158	87	69	376
63x40	99	72	158	88	70	403
63x50	99	86	169	88	78	464
75x40	118	72	173	104	70	537
75x50	118	86	184	104	79	620
75x63	118	99	196	104	90	660
90x63	144	99	224	129	93	1020
90x75	144	118	241	129	108	1133
110x63	169	118	253	150	98	1540
110x75	169	118	264	150	113	1596
110x90	169	144	286	150	132	1870

Raccordo maschio

15810

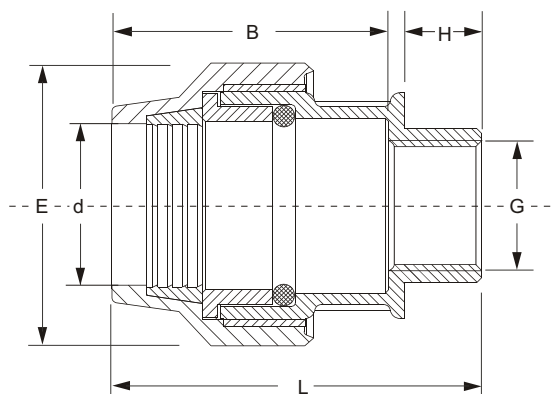
Male Adaptor - Raccord Male - Empalme Macho



d x G	E	L	L1	H	Peso/Weight (gr)
16x1/2"	39	70	48	18	25
16x3/4"	39	70	48	18	25
20x1/2"	42.5	71	50	18	38
20x3/4"	42.5	71	50	18	39
25x1/2"	48.5	76	54	18	48
25x3/4"	48.5	76	54	18	48
25x1"	48.5	78	54	20	50
32x3/4"	60	83	60	18	79
32x1"	60	85	62	20	81
32x1"1/4	60	87	61	22	85
40x1"	72	103	76	22	133
40x1"1/4	72	105	76	24	140
40x1"1/2	72	105	76	24	136
50x1"1/4	86	115	86	24	190
50x1"1/2	86	115	86	24	216
50x2"	86	117	87	25	217
63X1"1/2	99	126	99	24	300
63X2"	99	128	99	26	323
63X2"1/2	99	128	99	26	310
75X2"	118	144	114	25	469
75X2"1/2	118	145	114	26	475
75X3"	118	147	114	28	489
90X2"1/2	144	176	140	26	898
90X2"	144	178	141	28	815
90X3"	144	185	141	35	897
90X4"	144	191	132	41	989
110X3"	169	209	167	34	1368
110X4"	169	217	167	42	1445
125X4" - PLUS	176.5	350	252	43	4000
125x5" - PLUS	176.5	352	252	46	4000

Raccordo femmina

Female Adaptor - Raccord female - Empalme Hembra

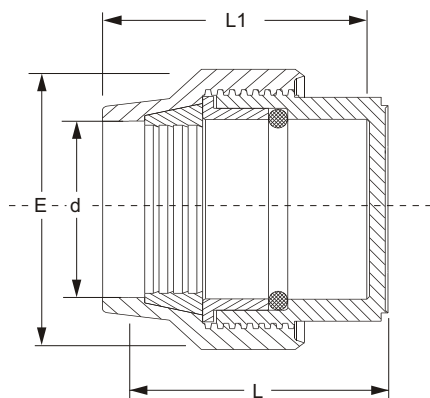
15820


d x G	E	L	L1	H	Peso/weight (gr)
16x1/2"	39	70	48	18	30
16x3/4"	39	70	48	18	32
20x1/2"	42.5	72	49	18	44
20x3/4"	42.5	72	49	18	41
25x1/2"	48.5	76	54	18	54
25x3/4"	48.5	76	54	18	59
25x1"	48.5	78	54	20	64
32x3/4"	60	84	61	18	86
32x1"	60	84	61	19.5	95
40x1"	72	101	77	19.5	130
40x1"1/4	72	106	76	24	150
40x1"1/2	72	106	77	24	141
50x1"1/4	86	115	89	23.5	205
50x1"1/2	86	115	88	23.5	236
50x2"	86	115	88	25.5	276
63x2"	99	129	98	26	360
75x2"	118	144	114	26	537
75x2"1/2	118	144	113	26	531
90x3"	144	177	141	27	980
110x3"	169	209	167	33	1277
110x4"	169	210	167	35	1450

Tappo terminale

16841

End Cap - Bouchon de fermeture - Tapón Terminal

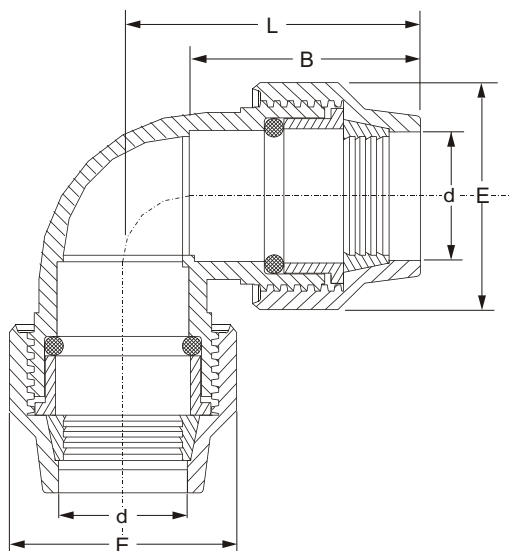


d	E	L	L1	Peso/weight (gr)
16	39	53	49	22
20	42.5	55	51	36
25	48.5	58	54	48
32	60	67	62	79
40	72	83	67	135
50	86	94	87	209
63	99	107	100	320
75	118	122	113	463
90	144	149	140	889
110	169	174	165	1375

Gomito a 90°

90° Elbow - Coude 90° - Codo 90°

16850

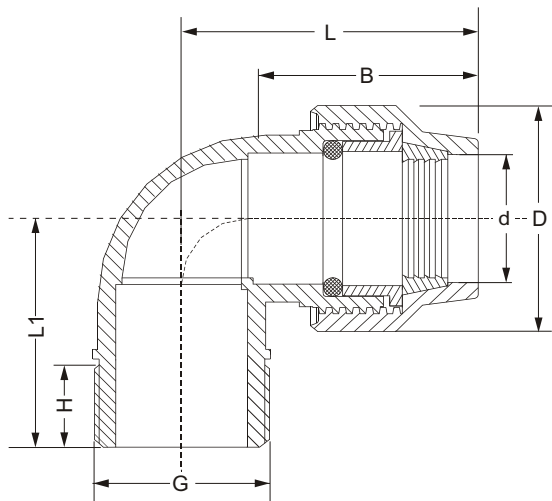


d	E	L	B	Peso/Weight (gr)
16	39	56	46	51
20	42.5	56	46	74
25	48.5	65	50	94
32	60	79	51	165
40	72	95	73	298
50	86	112	84	440
63	99	133	99	650
75	118	159	118	1082
90	144	192	142	1686
110	169	225	167	2620

Gomito a 90° filettato maschio

16825

90° male threaded elbow - Coude 90° fileté - Codo 90° roscado macho

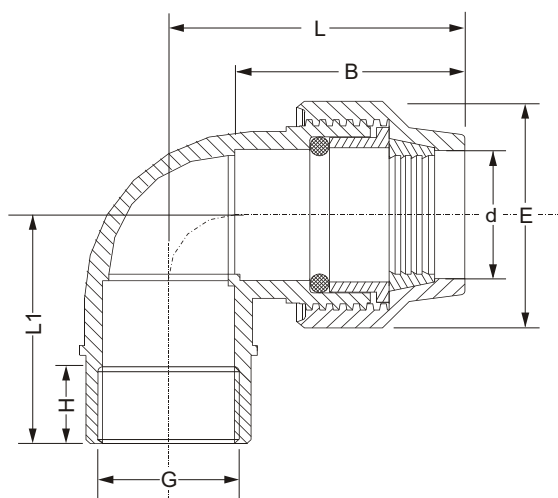


d x G	D	L	L1	B	H	Peso/Weight (gr)
16x1/2"	39	54	41	44	18	28
16x3/4"	39	54	52	44	21.5	34
20x1/2"	42.5	62	45	50	20	49
20x3/4"	42.5	62	45	50	20	50
25x1/2"	48.5	66	47	52	18	65
25x3/4"	48.5	66	47	52	18	65
25x1"	48.5	66	52	56	22	64
32x3/4"	60	75	50	58	18	87
32x1"	60	75	53	58	20	117
32x1"1/4	60	75	57	65	24	95
40x1"	72	96	62	76	22	195
40x1"1/4	72	96	66	76	24	220
40x1"1/2	72	96	67	76	26	220
40 x 2"	72	96	68	76	27	202
50x1"1/4	86	113	68	85	24	302
50x1"1/2	86	113	74	85	25	320
50x2"	86	113	76	85	27	327
63X1"1/2	99	132	85	97	26	445
63X2"	99	132	85	97	27	447
63X2"1/2	99	132	85	100	27	443
75X2"	118	156	92	118	27	840
75X2"1/2	118	156	92	118	27	810
75X3"	118	156	95	118	27	785
90X3"	144	192	112	143	29	1263
90X4"	144	192	125	143	34	1245
110X4"	169	225	130	167	34	1845

Gomito a 90° filettato femmina

16835

90° Female threaded elbow - Coude 90° taraudé - Codo 90° roscado hembra

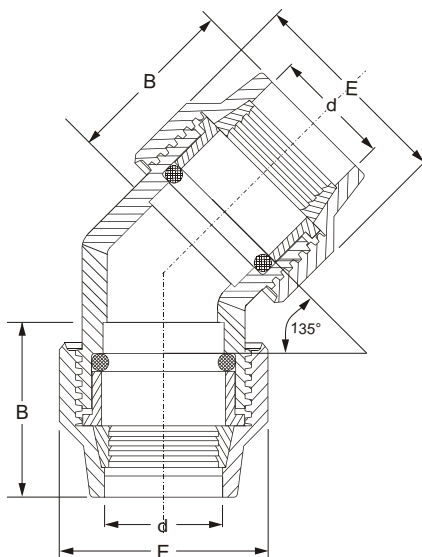


d x G	E	L	L1	B	H	Peso/weight (gr)
16x1/2"	39	54	47	44	16	35
16x3/4"	39	54	47	44	16	41
20x1/2"	42.5	62	44	50	19	48
20x3/4"	42.5	62	44	50	19	54
25x1/2"	48.5	66	46	52	18	66
25x3/4"	48.5	66	46	52	19	70
25x1"	48.5	66	50	56	20	81
32x3/4"	60	75	52	58	15	121
32x1"	60	75	52	58	20	122
40x1"	72	96	59	74	22	222
40x1"1/4	72	96	62	74	22	232
50x1"1/2	86	113	71	85	24	363
50x2"	86	113	71	85	25	391
63x1"1/2	99	132	84	97	24	410
63x2"	99	132	84	97	25	566
75x2"	118	156	92	118	29	851
75x2"1/2	118	156	97	118	28	855
90x3"	144	192	111	143	34	1210
110x3"	169	225	132	167	34	1805
110x4"	169	225	127	167	34	1720

Gomito a 45°

45° Elbow - Coude 45° - Codo 45°

16860

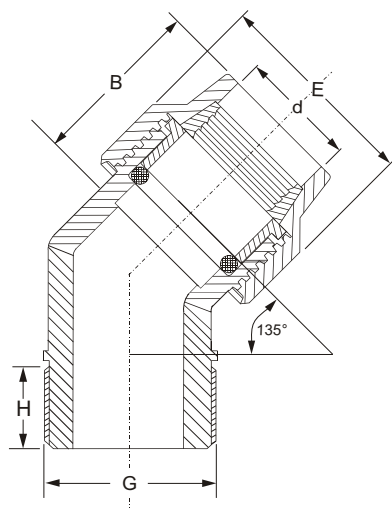


d	E	B	Peso/weight (gr)
20	39	38	50
25	42,5	42	72

Gomito a 45° fil. maschio

45° male threaded elbow - Coude 45° fileté
Codo 45° roscado macho

16845

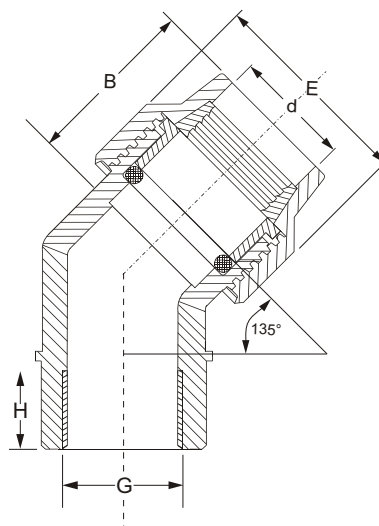


d x G	E	B	H	Peso/weight (gr)
20 x 1/2	42,5	38	17.5	40
20 x 3/4	42,5	38	17.5	50
25 x 1/2	42,5	42	17.5	40
25 x 3/4	42,5	42	17.5	50

Gomito a 45° fil. femmina

45° male female elbow - Coude 45° taraudé
Codo 45° roscado hembra

16855

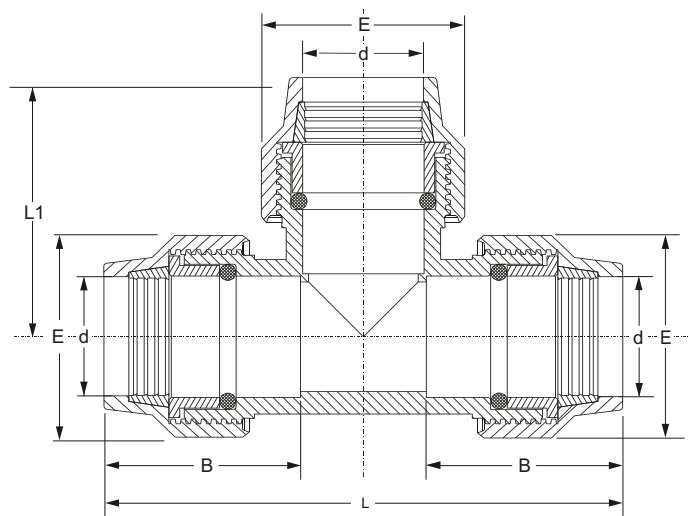


d x G	E	B	H	Peso/weight (gr)
20 x 1/2	42,5	38	18.5	40
20 x 3/4	42,5	38	18.5	50
25 x 1/2	42,5	42	18.5	40
25 x 3/4	42,5	42	18.5	50

Tee a 90°

90° Tee - Tè 90° - Te 90°

14810

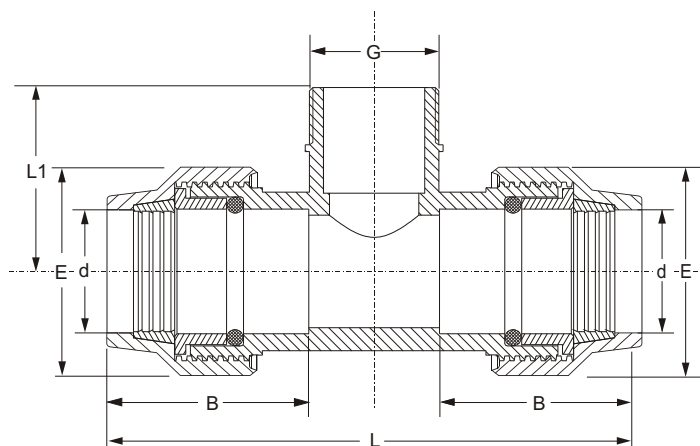


d	E	L	B	L1	Peso/weight (gr)
16 x 16 x 16	39	107	43	54	62
20 x 20 x 20	42.5	115	46	58	98
25 x 25 x 25	48.5	130	51	66	133
32 x 32 x 32	60	154	60	59	225
40 x 40 x 40	72	190	73	95	410
50 x 50 x 50	86	226	85	113	632
63 x 63 x 63	99	265	98	133	958
75 x 75 x 75	118	318	118	158	1540
90 x 90 x 90	144	384	142	192	2518
110 x 110 x 110	169	442	167	225	3800

Tee 90° filettato maschio

14830

90° male threaded Tee - Tè 90° filetè - Te 90° roscada macho

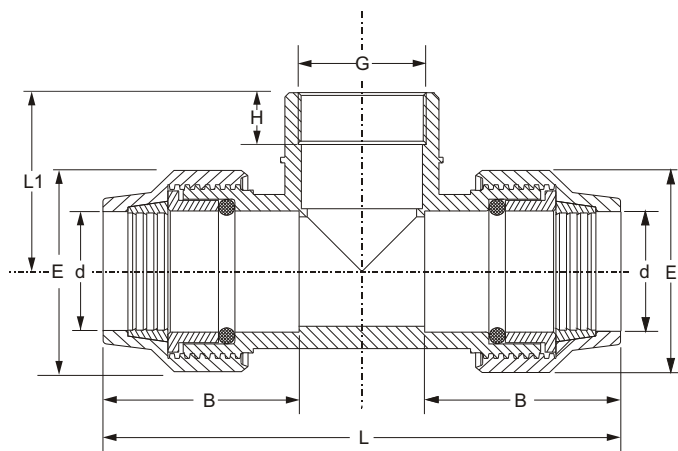


d x G	E	L	L1	B	H	Peso/weight (gr)
16x1/2"	39	107	41	43	18	50
16x3/4"	39	107	52	43	22	53
20x1/2"	42.5	115	43	46	18	58
20x3/4"	42.5	115	43	46	18	77
25x1/2"	48.5	139	50	56	20	101
25x3/4"	48.5	139	50	56	20	102
25x1"	48.5	130	50	51	22	101
32x3/4"	60	157	53	61	20	170
32x1"	60	157	56	61	22	173
40x1"	72	190	60	73	22	312
40x1"1/4	72	190	63	73	23.5	306
40 x 1" 1/2	72	190	66	73	25.5	287
50x1"1/2	86	226	75	85	26	491
50 x 2"	86	226	76	85	27	495
63 x 2"	99	266	88	98	28	746
63 x 2" 1/2	99	266	88	98	28	707
75 x 2"	118	318	98	118	28	1139
75 x 2"1/2	118	318	98	118	28	1128
75 x 3"	118	318	100	118	30	1020
90 x 3"	144	384	110	143	30	1726
90 x 4"	144	384	125	143	34	2000
110 x 3"	169	442	128	167	30	2945
110 x 4"	169	442	130	167	34	2910

Tee 90° filettato femmina

14840

90° female threaded Tee - Tè 90° taraudè - Te 90° roscada hembra

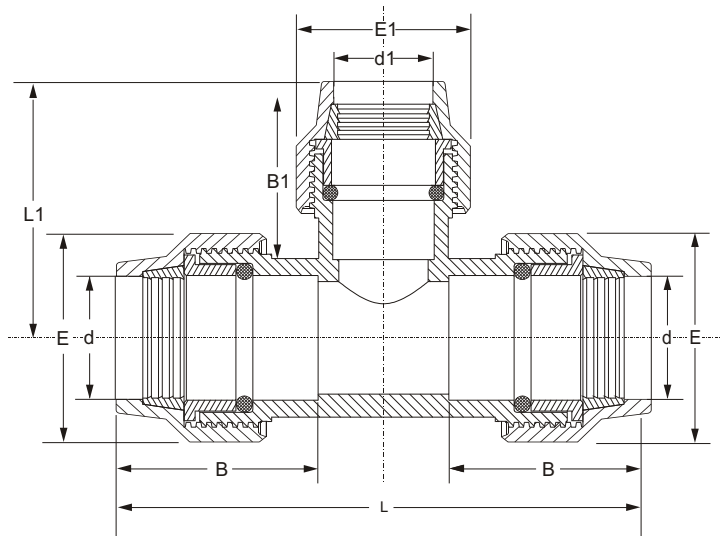


d x g	E	L	L1	B	H	Peso/weight (gr)
16x1/2"	39	107	47	43	18	57
16x3/4"	39	107	47	43	18	60
20x1/2"	42.5	115	43	46	18	94
20x3/4"	42.5	115	43	46	18	61
25x1/2"	48.5	139	45	56	18	109
25x3/4"	48.5	139	47	56	18	127
25x1"	48.5	130	50	59	19	136
32x3/4"	60	157	52	61	18	188
32x1"	60	157	54	61	20	195
40x1"	72	190	60	73	20	334
40x1"1/4	72	190	62	73	22	334
40 x 1" 1/2	72	190	64	73	23	375
50x1"1/4	86	226	70	85	23	545
50x1"1/2	86	226	72	85	23	552
50x2"	86	226	74	85	28	628
63 x 2"	99	266	85	98	28	857
63 x 2" 1/2	99	266	85	98	28	860
75 x 2"	118	318	92	118	28	1250
75 x 2"1/2	118	318	96	118	28	1295
75 x 3"	118	318	98	118	28	1182
90 x 3"	144	384	105	143	28	1982
90 x 4"	144	384	111	143	33	2060
110 x 3"	169	442	120	167	28	2740
110 x 4"	169	442	127	167	33	2960

Tee 90° ridotta

14820

90° Reducing Tee - Tè 90° réduit - Te 90° reducida

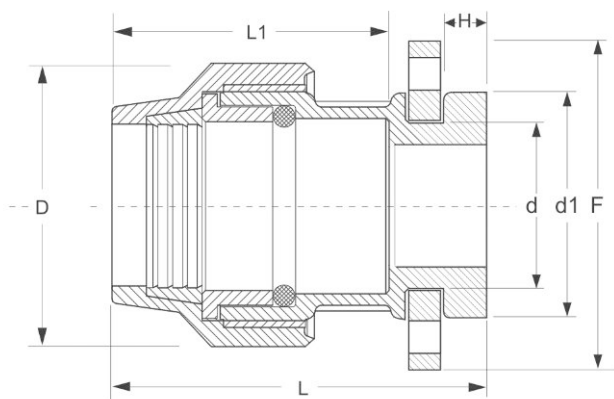


d x d1 x d	E	E1	L	B	B1	L1	Peso/weight (gr)
110 x 63 x 110	169	99	452	167	125	185	3120

Raccordo Flangiato

15830

Flanged adaptors - Raccords avec brides - Conector con brida

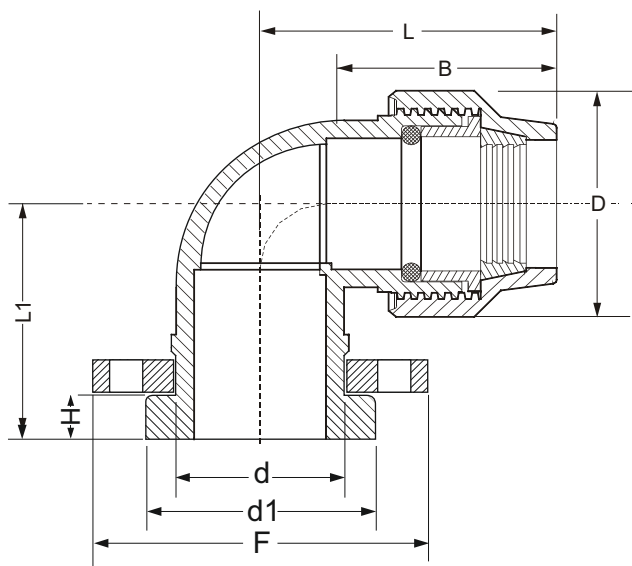


	D	L	L1	H	d	d1	F	Peso/weight (gr)
63 x 2"	99	163	95	17,5	77	103	165	764
75 x 2" 1/2	118	165	113	17,5	88	122	185	1044
90 x 3"	144	197	141	20	108	138	200	1492
90 x 4"	144	177	141	24	131	158	220	1693
110 x 4"	169	225	167	24	131	158	220	2070

Gomito 90° flangiato

16880

90° Flanged Elbow - 90° Coude avec brides - Codo 90° con brida



	D	L	L1	B	H	d1	F	Peso/weight (gr)
50x2"	86	113	76	85	17,5	103	165	-
63X2"	99	132	85	97	17,5	103	165	-
63X2"1/2	99	132	85	100	17,5	122	185	-
75X2"1/2	118	156	92	118	17,5	122	185	-
75X3"	118	156	95	118	20	138	200	-
90X3"	144	192	150	143	20	138	200	1800
90X4"	144	192	125	143	24	158	220	-
110X4"	169	225	130	167	24	158	220	2500



Member of Green
Building Council Italia



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