

ABRASION RESISTANT PIPELINE FITTINGS

APPLICATION:

FLSmith's 450 Iron, abrasion-resistant pipeline fittings are ideally suited for pneumatic conveying systems handling abrasive materials. Various configurations are available to suit pipeline layouts. Bend radii are nominally three times pipe diameter.

SPECIFICATION:

Materials of Construction

Fittings are cast throughout their entire thickness with FLSmith 450, abrasion-resistant cast iron with 475-550 Brinell hardness.

Availability

Fittings are generally available in nominal diameters ranging from 4 inches to 12 inches (100 to 300 mm) in size.

Wearbacks are available as integral castings or replaceable bolted units.



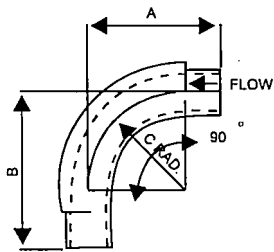
Standard end style is plain end for compression type couplings and/or flanged adapters. Cast flanged ends are also available in certain configurations. Consult availability chart below for standard size and configurations.

Availability Chart

DIA Inches	INTEGRAL WEARBACK							REPLACEABLE WEARBACK			
	90°	60°	45°	30°	22-1/2°	45° Lateral	Tee	90°	60°	45°	45° Lateral
4"	P, F	P	P	P, F	P	P	P, F	P, F	P	P, F	F
5"	P	P	P	N/A	P	N/A	F	P, F	P	N/A	N/A
6"	P, F	P	P, F	P	P, F	P, F	P, F	P	P	P	P
8"	P, F	P, F	P, F	P	P	P	P, F	P	P	P	P
10"	P, F	P	P, F	P	P	P	F	P	P	P	P, F
12"	N/A	N/A	N/A	P	N/A	N/A	N/A	P	N/A	P	F

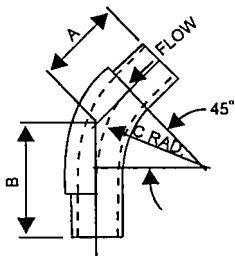
P = plain end F = flanged end N/A = not available as standard

INTEGRAL WEARBACKS (PLAIN ENDS)



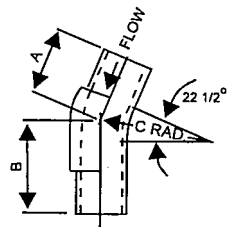
90° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	17-15/16	24	12	100	170-78-4-1983-90
5	20-7/8	27	14-15/16	155	170-78-4-1983-94
6	24	30-1/8	18-1/8	210	170-78-4-1983-91
8	29-15/16	36-1/16	24	405	170-78-4-1983-92
10	38	46-1/16	29-15/16	660	170-78-4-1983-93



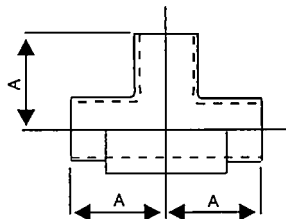
45° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	13	17	12	90	170-78-4-1981-90
5	14-1/4	18-3/16	14-15/16	122	170-78-4-1981-94
6	15-9/16	19-1/2	18-1/8	155	170-78-4-1981-91
8	18	22	24	280	170-78-4-1981-92
10	23-7/16	28-9/16	29-15/16	470	170-78-4-1981-93



22-1/2° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	10-7/16	14-3/8	12	60	170-78-4-1979-90
5	11	14-5/16	14-15/16	100	170-78-4-1979-94
6	11-11/16	15-5/8	18-1/8	120	170-78-4-1979-91
8	12-13/16	16-3/4	24	205	170-78-4-1979-92
10	17	22-1/8	29-15/16	345	170-78-4-1979-93



Tee

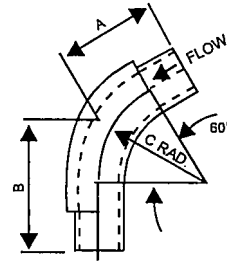
Dia. (In.)	Dimensions (Inches)	Weight (Lbs.)	Part Number
	A		
4	10-1/4	57	170-78-4-1987-90
6	11	103	170-78-4-1987-92
8	12-3/16	176	170-78-4-1987-93

More Diagrams of Integral Wearbacks on following page.

INTEGRAL WEARBACKS (PLAIN ENDS)

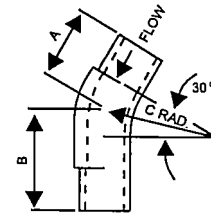
60° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	15	18-15/16	12	90	170-78-4-1982-90
5	20-11/16	20-5/8	14-15/16	115	170-78-4-1982-94
6	18-1/2	22-7/16	18-1/8	180	170-78-4-1982-91
8	21-15/16	25-7/8	24	335	170-78-4-1982-92
10	28-5/16	33-7/16	29-15/16	530	170-78-4-1982-93



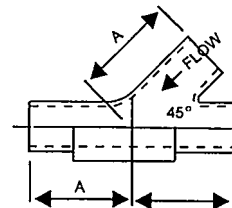
30° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	11-5/16	15-1/4	12	73	170-78-4-1980-90
6	12-15/16	16-7/8	18-1/8	130	170-78-4-1980-94
8	14-1/2	18-7/16	24	230	170-78-4-1980-91
10	19-1/16	24-3/16	29-15/16	385	170-78-4-1980-92
12	20-11/16	25-13/16	36-1/16	670	170-78-4-1980-93



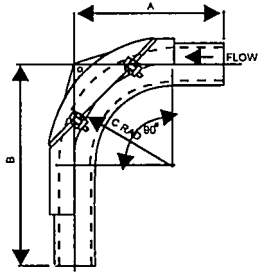
45° Lateral

Dia. (In.)	Dimensions (Inches)	Weight (Lbs.)	Part Number
	A		
4	18-1/8	125	170-78-4-1984-90
6	21-1/16	230	170-78-4-1984-91
8	24	415	170-78-4-1984-92
10	23-15/16	670	170-78-4-1984-93



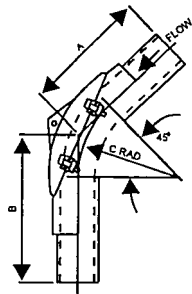
NOTE: Flanged fitting dimensions and part numbers are available on request.

INTEGRAL WEARBACKS (PLAIN ENDS)



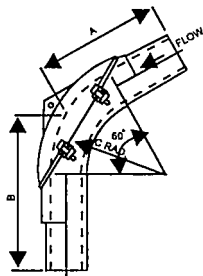
90° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	17-7/8	23-13/16	12	115	170-78-3-1915-00
5	20-7/8	26-3/4	15	165	170-78-3-2032-00
6	24	29-15/16	18-1/8	220	170-78-3-1998-00
8	29-15/16	35-13/16	24	395	170-78-3-2000-00
10	37-13/16	45-11/16	29-15/16	660	170-78-3-2002-00
12	43-7/8	51-3/4	36-1/16	962	170-78-3-2041-00



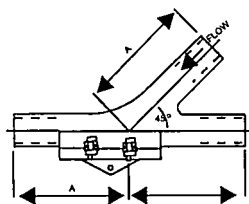
45° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	14	17-9/16	12	95	170-78-3-2004-00
6	16-9/16	20-1/16	18-1/8	170	170-78-3-2007-00
8	19	22-9/16	24	295	170-78-3-2010-00
10	23-7/16	28-3/16	29-15/16	500	170-78-3-2013-00
12	25-15/16	30-11/16	36-1/16	727	170-78-3-2053-00



60° Elbow

Dia. (In.)	Dimensions (Inches)			Weight (Lbs.)	Part Number
	A	B	C		
4	15-5/8	18-3/4	12	105	170-78-3-2016-00
5	17-5/16	20-7/8	15	165	170-78-3-2035-00
6	19-1/8	22-5/8	18-1/8	205	170-78-3-2017-00
8	22-1/2	26-1/16	24	340	170-78-3-2019-00
10	27-7/8	32-3/16	29-15/16	544	170-78-3-2019-00



45° Lateral

Dia. (In.)	Dimensions (Inches)	Weight (Lbs.)	Part Number
	A		
6	21-1/16	260	170-78-4-1995-00
8	24	455	170-78-4-1996-00
10	29-15/16	720	170-78-4-1997-00

NOTE: Flanged fitting dimensions and part numbers are available on request.