

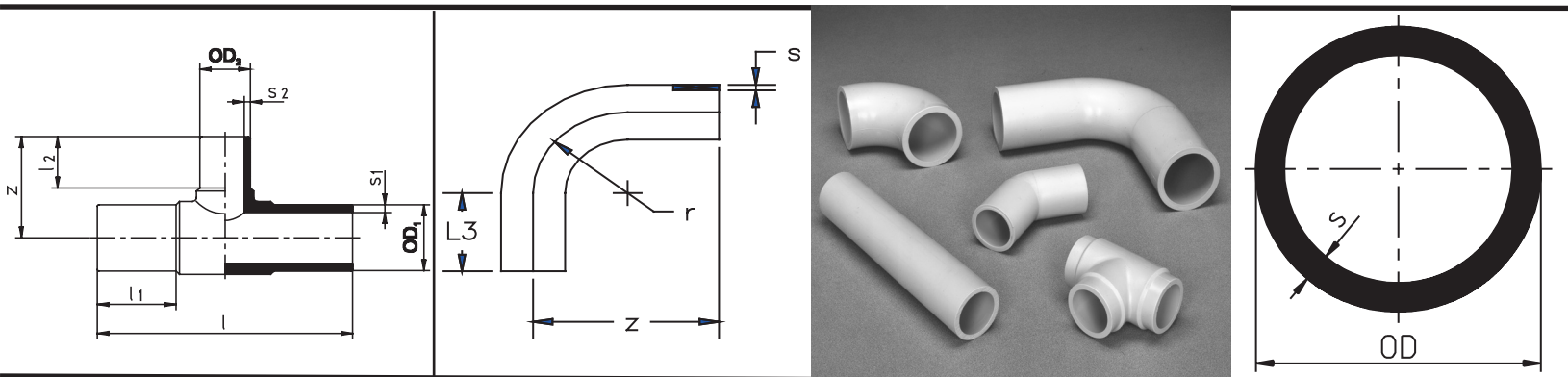
Dimensional Guide

Proline™

Polypropylene

Single Wall Piping System

Socket Fusion



Proline™ Dimensional Guide

Piping systems engineered to meet the most demanding industrial applications

Together, with our internationally recognized partner, Agru, Asahi/America provides the most comprehensive and technologically advanced industrial piping systems available. Proline™ Polypropylene offers more sizes, fittings and pressure ratings than from any other single source. This extensive product offering is supported by an experienced and knowledgeable group of staff engineers, technicians and sales agents, all ready to assist you with your application's requirements.



Proline™ Polypropylene

Polypropylene (PP) is a member of the polyolefin family. PP is one of the lightest plastics known. It possesses excellent chemical resistance to many acids, alkalis and organic solvents. PP is one of the best materials to use for systems exposed to varying PH levels, as many plastics do not handle both acids and bases well. It is not recommended for use with hydrocarbons and aromatics. Its upper temperature limit is 195° (90° C). Proline™ is available in 150 psi and 45 psi standard. Options in 90 psi are available. Proline® is available from 3/8" (16mm) to 54" (1400mm).

Note to this Guide:

The system is metric sized based on Standard Dimension SDR pipe sizes. **Dimensions given are for reference only.** All systems, regardless of material, maintain a constant pipe and fitting OD. Imperial (inch) ODs are provided as nominal sizes only.

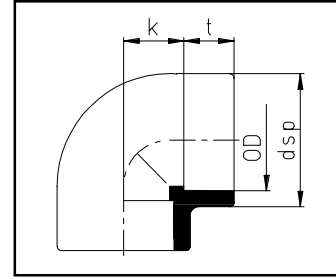
Within the SDR System, nominal pressure ratings vary according to material but not OD. Pressure ratings generally remain constant within material and SDR classification. For example: all SDR21 PVDF pipe and fittings are rated to 16 bar or 230psi. Exceptions, if any, may be found in cases where valves or threads carry ratings independent of SDR sizing.

Outside and Inside Dimensional Comparison for Common Process Pipe Systems

Nominal Pipe Size	SDR11		SDR21		SDR33		SCH40		SCH80		SS Tube	
	OD (INCH)	ID (INCH)	OD (INCH)	ID (INCH)	OD (INCH)	ID (INCH)	OD (INCH)	ID (INCH)	OD (INCH)	ID (INCH)	OD (INCH)	ID (INCH)
1/2	0.787	0.591	0.787	0.644	-	-	0.840	0.622	0.840	0.546	0.50	0.37
3/4	0.984	0.766	0.984	0.830	-	-	1.050	0.82	1.050	0.742	0.75	0.62
1	1.260	1.020	1.260	1.071	-	-	1.315	1.049	1.315	0.957	1.00	0.87
1-1/4	1.575	1.288	1.575	1.381	-	-	1.660	1.380	1.660	1.278	-	-
1-1/2	1.969	1.611	1.969	1.734	-	-	1.900	1.610	1.900	1.500	1.50	1.37
2	2.480	2.029	2.480	2.244	-	-	2.375	2.067	2.375	1.939	2.00	1.87
2-1/2	2.953	2.416	2.953	2.672	-	-	2.875	2.469	2.875	2.323	2.50	2.37
3	3.543	2.899	3.543	3.206	3.543	3.329	3.500	3.068	3.500	2.900	3.00	2.87
4	4.331	3.543	4.331	3.918	4.331	4.068	4.500	4.026	4.500	3.826	4.00	3.84
6	6.299	5.154	6.299	5.699	6.299	5.917	6.625	6.065	6.625	5.761	6.00	5.78
8	7.874	6.442	7.874	7.124	7.874	7.397	8.625	7.981	8.625	7.625	-	-
9	8.858	7.248	8.858	8.015	8.858	8.321	-	-	-	-	-	-
10	9.843	8.053	9.843	8.905	9.843	9.246	10.75	10.020	10.75	9.564	-	-
12	12.402	10.147	12.402	11.220	12.402	11.650	12.75	11.938	12.75	11.376	-	-

Proline 150 Socket 90

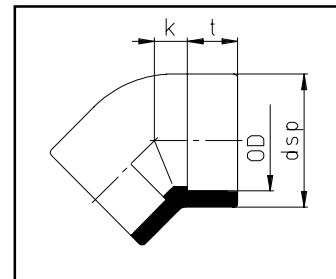
- Socket Fusion
- Molded



OD		Dimensions			PN 10		
[mm]	[inch]	dsp	k	t	Agru Code	Asahi Part #	Weight (lbs)
20	1/2"	1.15	0.55	0.63	11.051.0020.07	5094005	0.04
25	3/4"	1.38	0.67	0.71	11.051.0025.07	5094007	0.07
32	1"	1.70	0.79	0.79	11.051.0032.07	5094010	0.09
40	1 1/4"	2.10	0.98	0.87	11.051.0040.07	5094012	0.15
50	1 1/2"	2.58	1.10	0.98	11.051.0050.07	5094015	0.26
63	2"	3.19	1.38	1.14	11.051.0063.07	5094020	0.49
75	2 1/2"	3.62	1.50	1.26	11.051.0075.07	5094025	0.66
90	3"	4.48	1.93	1.50	11.051.0090.07	5094030	1.26
110	4"	5.24	2.09	1.69	11.051.0110.07	5094040	1.76

Proline 150 Socket 45

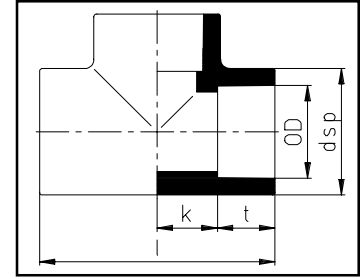
- Socket Fusion
- Molded



OD		Dimensions			PN 10		
[mm]	[inch]	dsp	k	t	Agru Code	Asahi Part #	Weight (lbs)
20	1/2"	1.18	0.43	0.63	11.050.0020.07	5098005	0.04
25	3/4"	1.38	0.55	0.71	11.050.0025.07	5098007	0.04
32	1"	1.69	0.67	0.79	11.050.0032.07	5098010	0.09
40	1 1/4"	2.09	0.83	0.87	11.050.0040.07	5098012	0.13
50	1 1/2"	2.56	1.02	0.94	11.050.0050.07	5098015	0.20
63	2"	3.19	1.30	1.14	11.050.0063.07	5098020	0.40
75	2 1/2"	3.62	1.52	1.26	11.050.0075.07	5098025	0.49
90	3"	4.45	1.81	1.46	11.050.0090.07	5098030	0.90
110	4"	5.31	2.20	1.65	11.050.0110.07	5098040	1.30

Proline 150 Socket Tee

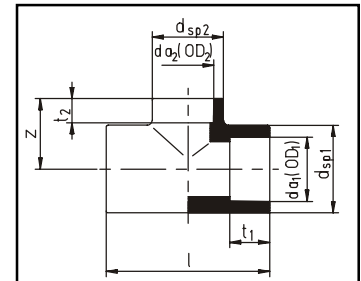
- Socket Fusion
- Molded



OD		Dimensions				PN 10		
[mm]	[inch]	dsp	k	t	l	Agru Code	Asahi Part #	Weight (lbs)
20	1/2"	1.15	2.36	0.55	0.63	11.056.0020.07	5091005	0.07
25	3/4"	1.39	2.76	0.67	0.71	11.056.0025.07	5091007	0.09
32	1"	1.69	3.23	0.83	0.79	11.056.0032.07	5091010	0.13
40	1 1/4"	2.09	3.70	0.98	0.87	11.056.0040.07	5091012	0.22
50	1 1/2"	2.56	4.25	1.18	0.94	11.056.0050.07	5091015	0.35
63	2"	3.19	5.16	1.44	1.14	11.056.0063.07	5091020	0.66
75	2 1/2"	3.66	5.51	1.50	1.26	11.056.0075.07	5091025	0.88
90	3"	4.49	6.93	2.01	1.46	11.056.0090.07	5091030	1.79
110	4"	5.28	7.80	2.24	1.65	11.056.0110.07	5091040	2.31

Proline 150 Socket Reducing Tee

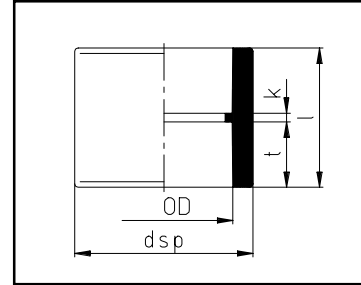
- Socket Fusion
- Molded



OD		Dimensions						PN 10		
[mm]	[inch]	dsp ₁	dsp ₂	t ₁	t ₂	l	z	Agru Code	Asahi Part #	Weight (lbs)
25/20	3/4 x 1/2"	1.37	1.18	0.71	0.63	2.70	1.26	11.055.2520.07	5093101	0.09
32/20	1 x 1/2"	1.69	1.18	0.79	0.63	3.14	1.57	11.055.3220.07	5093130	0.11
32/25	1 x 3/4"	1.69	1.38	0.79	0.71	3.13	1.57	11.055.3225.07	5093131	0.13
40/20	1 1/4 x 1/2"	2.09	1.17	0.87	0.63	3.54	1.76	11.055.4020.07	5093166	0.18
40/25	1 1/4 x 3/4"	2.09	1.39	0.87	0.71	3.56	1.84	11.055.4025.07	5093167	0.18
50/25	1 1/2 x 1/2"	2.57	1.18	0.94	0.63	4.33	1.97	11.055.5020.07	5093208	0.35
50/25	1 1/2 x 3/4"	2.58	1.40	0.94	0.71	4.33	2.01	11.055.5025.07	5093210	0.37

Proline 150 Socket Coupling

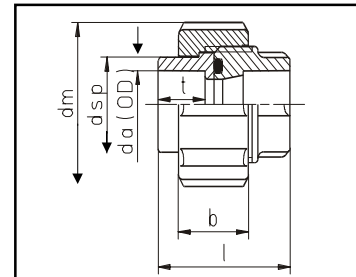
- Socket Fusion
- Molded



OD		Dimensions				PN 10		
[mm]	[inch]	dsp	l	k	t	Agru Code	Asahi Part #	Weight (lbs)
20	½"	1.16	1.38	0.12	0.63	11.053.0020.07	5085005	0.02
25	¾"	1.38	1.54	0.12	0.71	11.053.0025.07	5085007	0.04
32	1"	1.70	1.69	0.12	0.79	11.053.0032.07	5085010	0.07
40	1¼"	2.04	1.85	0.12	0.87	11.053.0040.07	5085012	0.09
50	1½"	2.54	2.05	0.16	0.94	11.053.0050.07	5085015	0.15
63	2"	3.20	2.44	0.16	1.14	11.053.0063.07	5085020	0.26
75	2½"	3.64	2.76	0.24	1.26	11.053.0075.07	5085025	0.33
90	3"	4.47	3.15	0.24	1.46	11.053.0090.07	5085030	0.66
110	4"	5.27	3.54	0.24	1.65	11.053.0110.07	5085040	0.93

Proline 150 T-24 Socket Union

- Socket Fusion
- Molded, FPM O'Ring

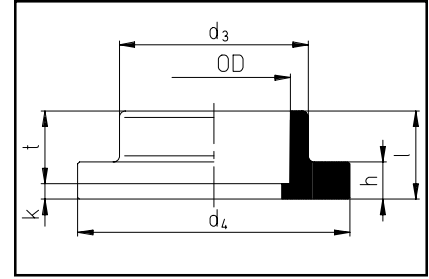


OD		Dimensions					PN 10		
[mm]	[inch]	dsp	l	t	dm	b	Agru Code	Asahi Part #	Weight (lbs)
20	½"	1.07	1.77	0.63	1.85	0.94	024.1020.07	5097005	0.21
25	¾"	1.41	1.93	0.71	2.24	1.02	024.1025.07	5097007	0.27
32	1"	1.63	2.09	0.77	2.52	1.18	024.1032.07	5097010	0.32
40	1¼"	2.08	2.32	0.89	3.07	1.22	024.1040.07	5097012	0.43
50	1½"	2.31	2.64	0.96	3.50	1.38	024.1050.06	5097015	0.66
63	2"	2.90	3.11	1.12	4.29	1.54	024.1063.07	5097020	0.89

- Also Available with EPDM O'Rings. Please Consult Factory.

Proline 150 Socket Stub End

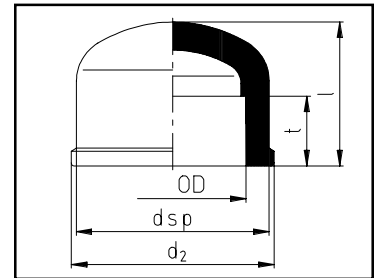
- Socket Fusion
- Molded



OD		Dimensions						PN 10		
[mm]	[inch]	d_3	d_4	h	l	k	t	Agru Code	Asahi Part #	Weight (lbs)
20	½"	1.06	1.75	0.39	0.83	0.20	0.63	11.052.0020.07	5080005	0.03
25	¾"	1.30	2.13	0.39	0.91	0.20	0.71	11.052.0025.07	5080007	0.05
32	1"	1.61	2.50	0.39	1.02	0.24	0.79	11.052.0032.07	5080010	0.08
40	1¼"	1.97	2.81	0.41	1.02	0.16	0.87	11.052.0040.07	5080012	0.11
50	1½"	2.42	3.25	0.51	1.18	0.24	0.94	11.052.0050.07	5080015	0.15
63	2"	3.02	3.95	0.55	1.34	0.20	1.14	11.052.0063.07	5080020	0.20
75	2½"	3.59	4.61	0.63	1.57	0.31	1.26	11.052.0075.07	5080025	0.32
90	3"	4.13	5.21	0.67	1.73	0.28	1.46	11.052.0090.07	5080030	0.68
110	4"	5.16	6.22	0.71	1.85	0.20	1.65	11.052.0110.07	5080040	1.10

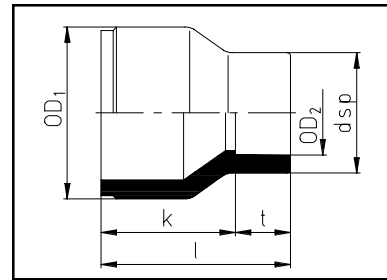
Proline 150 Socket Cap

- Socket Fusion
- Molded



OD		Dimensions				PN 10		
[mm]	[inch]	dsp	d_2	l	t	Agru Code	Asahi Part #	Weight (lbs)
20	½"	1.14	1.26	1.02	0.63	11.054.0020.07	5081005	0.02
25	¾"	1.38	1.50	1.18	0.71	11.054.0025.07	5081007	0.02
32	1"	1.69	1.85	1.38	0.79	11.054.0032.07	5081010	0.04
40	1¼"	2.07	2.28	1.50	0.87	11.054.0040.07	5081012	0.07
50	1½"	2.54	2.76	1.97	0.94	11.054.0050.07	5081015	0.15
63	2"	3.17	3.39	2.32	1.14	11.054.0063.07	5081020	0.29
75	2½"	3.64	3.86	2.64	1.26	11.054.0075.07	5081025	0.35
90	3"	4.45	4.69	3.03	1.46	11.054.0090.07	5081030	0.55
110	4"	5.31	5.55	3.70	1.65	11.054.0110.07	5081040	0.95

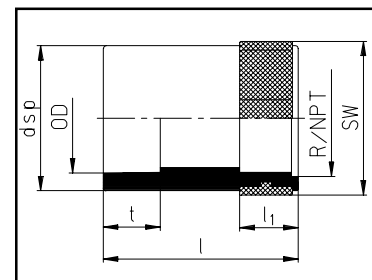
Proline 150 Socket Concentric Reducer



- Socket Fusion
- Molded

OD		Dimensions			PN 10		
[mm]	[inch]	l	k	t	Agru Code	Asahi Part #	Weight (lbs)
25/20	¾ x ½	1.18	0.63	1.54	11.057.2520.07	5095101	0.02
32/20	1 x ½	1.18	0.63	1.79	11.057.3220.07	5095130	0.04
32/25	1 x ¾	1.38	0.71	1.77	11.057.3225.07	5095131	0.04
40/20	1¼ x ½	1.16	0.63	1.97	11.057.4020.07	5095166	0.04
40/25	1¼ x ¾	1.36	0.71	1.97	11.057.4025.07	5095167	0.04
40/32	1¼ x 1	1.69	0.79	1.97	11.057.4032.07	5095168	0.07
50/20	1½ x ½	1.16	0.63	2.17	11.057.5020.07	5095208	0.07
50/25	1½ x ¾	1.37	0.71	2.17	11.057.5025.07	5095210	0.07
50/32	1½ x 1	1.72	0.79	2.17	11.057.5032.07	5095211	0.09
50/40	1½ x 1¼	2.08	0.87	2.17	11.057.5040.07	5095212	0.11
63/25	2 x ¾	1.37	0.71	2.56	11.057.6325.07	5095248	0.13
63/32	2 x 1	1.69	0.79	2.56	11.057.6332.07	5095249	0.13
63/40	2 x 1¼	2.08	0.87	2.56	11.057.6340.07	5095250	0.15
63/50	2 x 1½	2.55	0.94	2.56	11.057.6350.07	5095251	0.15
75/63	2½ x 2	3.21	1.14	2.52	11.057.7563.07	5095292	0.33
90/63	3 x 2	3.18	1.14	3.46	11.057.9063.07	5095338	0.40
90/75	3 x 2½	3.66	1.26	3.41	11.057.9075.07	5095339	0.42
110/63	4 x 2	3.20	1.14	3.54	11.057.1163.07	5095420	0.55
110/90	4 x 3	4.48	1.46	3.49	11.057.1190.07	5095422	0.66

Proline 150 Socket Female Adapter

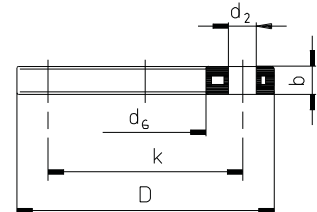


- Socket Fusion
- Molded NPT Adapter

OD		Dimensions					PN 10		
[mm]	[inch]	dsp	l	t	l ₁	SW	Agru Code	Asahi Part #	Weight (lbs)
20	½"	1.14	1.77	0.63	0.63	1.26	11.034.2021.07	5084005	0.07
25	¾"	1.38	1.99	0.71	0.71	1.61	11.034.2526.07	5084007	0.13
32	1"	1.67	2.24	0.79	0.79	1.81	11.034.3233.07	5084010	0.18
40	1¼"	2.05	2.46	0.87	0.87	2.17	11.034.4041.07	5084012	0.26
50	1½"	2.52	2.68	0.94	1.02	2.76	11.034.5051.07	5084015	0.49
63	2"	3.15	2.91	1.14	1.18	3.35	11.034.6364.07	5084020	0.75

Proline 150 PP Blind Flange

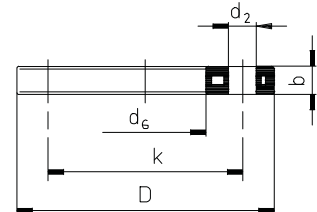
- with Steel Insert
- Molded



OD		Dimensions					up to a pressure rate of 16 bar acc. DIN 16962 part5				
[mm]	[inch]	D	k	d ₂	b	Bolt Holes	Torque [ft/lbs]	Agru Code	Asahi Part #	Weight (lbs)	
20	½"	3.740	2 3/8"	5/8"	0.472	4	11	11.043.0020.11	5042005	0.49	
25	¾"	4.016	2 3/4"	5/8"	0.472	4	11	11.043.0025.11	5042007	0.62	
32	1"	4.488	3 1/8"	5/8"	0.630	4	11	11.043.0032.11	5042010	0.93	
40	1¼"	5.118	3 1/2"	5/8"	0.630	4	18	11.043.0040.11	5042012	1.12	
50	1½"	5.236	3 7/8"	5/8"	0.709	4	26	11.043.0050.11	5042015	1.32	
63	2"	6.378	4 7/8"	3/4"	0.709	4	26	11.043.0063.11	5042020	1.92	
75	2½"	7.244	5 1/2"	3/4"	0.709	4	30	11.043.0075.11	5042025	2.29	
90	3"	7.638	6"	3/4"	0.709	4	30	11.043.0090.11	5042030	2.43	
110	4"	9.016	7 1/2"	3/4"	0.709	8	30	11.043.0110.11	5042040	3.57	
160	6"	11.142	9 1/2"	7/8"	0.945	8	44	11.043.0160.11	5042060	5.47	
200	8"	13.583	11 3/4"	7/8"	0.945	8	52	11.043.0200.11	5042080	7.80	
250	10"	16.220	14 1/4"	1"	1.063	12	74	11.043.0250.11	5042100	14.18	
315	12"	19.173	17"	1"	1.260	12	81	11.043.0315.11	5042120	27.87	

Proline 150 PP Backing Ring

- with Steel Insert
- Molded



OD		Dimensions					up to a pressure rate of 16 bar acc. DIN 16962 part5				
[mm]	[inch]	D	k	d ₆	d ₂	b	Bolt Holes	Torque [ft/lbs]	Agro Code	Asahi Part #	Weight (lbs)
20	½"	3.740	2 3/8"	1.102	5/8"	0.472	4	11	11.013.0020.11	5046005	0.49
25	¾"	4.016	2 3/4"	1.339	5/8"	0.472	4	11	11.013.0025.11	5046007	0.62
32	1"	4.488	3 1/8"	1.654	5/8"	0.630	4	11	11.013.0032.11	5046010	0.93
40	1¼"	5.118	3 1/2"	2.008	5/8"	0.630	4	18	11.013.0040.11	5046012	1.12
50	1½"	5.236	3 7/8"	2.441	5/8"	0.709	4	26	11.013.0050.11	5046015	1.32
63	2"	6.378	4 7/8"	3.071	3/4"	0.709	4	26	11.013.0063.11	5046020	1.92
75	2½"	7.244	5 1/2"	3.622	3/4"	0.709	4	30	11.013.0075.11	5046025	2.29
90	3"	7.638	6"	4.370	3/4"	0.709	4	30	11.013.0090.11	5046030	2.43
110	4"	9.016	7 1/2"	5.236	3/4"	0.709	8	30	11.013.0110.11	5046040	3.57
160	6"	11.142	9 1/2"	7.008	7/8"	0.945	8	44	11.013.0160.11	5046060	5.47
200	8"	13.583	11 3/4"	9.291	7/8"	0.945	8	52	11.013.0200.11	5046080	7.80
250	10"	16.220	14 1/4"	11.339	1"	1.063	12	74	11.013.0250.11	5046100	14.18
315	12"	19.173	17"	13.307	1"	1.260	12	81	11.013.0315.11	5046120	27.87

225mm (9") AND 200mm (8") Stub Ends use 8" ANSI Backing Ring.
Consult factory for Backing Ring Details larger than 12".

WARRANTY

Warranty; Limitation on Liability. Asahi/America, Inc., (“Seller”) warrants, to the original Buyer only, that all products delivered hereunder shall be free from defects in design and manufacture for a period of one year from the date of delivery, provided that such products are installed, used, operated, adjusted and serviced only in a proper and appropriate manner and in strict accordance with any instructions relating thereto furnished to Buyer by Seller. In no event shall the foregoing warranty extend to any products in any way caused or allowed to be, or installed, operated or used in such a manner as to be, subject or exposed to conditions of misuse, abuse or accident.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NO WARRANTY OF MERCHANTABILITY, NO IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, AND NO IMPLIED WARRANTY ARISING BY USAGE OF TRADE, COURSE OF DEALING OR COURSE OF PERFORMANCE IS GIVEN BY SELLER OR SHALL ARISE BY OR IN CONNECTION WITH THIS SALE AND/OR THE SELLER’S AND/OR BUYER’S CONDUCT IN RELATION THERETO OR TO EACH OTHER, AND IN NO EVENT SHALL SELLER BE LIABLE ON ANY SUCH WARRANTY WITH RESPECT TO ANY PRODUCT.

Liability of the Seller under or in connection with this sale and/or the foregoing warranty shall be limited, at the sole option of the Seller, to one repair of, replacement of, or a refund of the purchase price of any products or part thereof (a), with respect to which Seller receives, promptly after Buyer’s discovery of any alleged defect and prior to the expiration of the one-year warranty period as provided above, notice from Buyer or Buyer’s claim defect and (b) which shall be returned to Seller by Buyer, as provided herein, promptly after Buyer’s discovery of such alleged defect and which shall be determined by the Seller to have proven defective within the one-year warranty period provided above; failure by Buyer to notify Seller and return such products to Seller after Buyer’s discovery of such alleged defect shall constitute a waiver by Buyer of any and all claims of any kind with respect thereto. Any products returned by Buyer to Seller under the foregoing terms shall be returned to Seller’s place of business freight prepaid, accompanied or preceded by Buyer’s particularized statement of the claimed defect. The risk of loss and freight charges to and from Seller in connection with any returned products shall be borne by Buyer; but Seller shall bear such additional freight charges arising in connection with any such returned products ultimately determined by Seller to be defective under the terms of the foregoing warranty, the cost of repair or replacement (if any) of such products, and the risk of loss or damage which such products are in Seller’s possession at its place of business. The foregoing remedy shall constitute the sole and exclusive remedy of the Buyer under or in connection with this sale and/or warranty of the Seller. Except as specifically provided herein, Seller shall not be responsible or liable for any costs, expenses or damages of Buyer in connection with any removal, repair or replacement (including any attempts or actions relating thereto) of any allegedly defective products, and no charge of setoff of any kind of Buyer relating thereto shall be made against the Seller without prior and specific written approval of Seller.

IN NO EVENT SHALL SELLER BE RESPONSIBLE OR LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING IN ANY WAY IN CONNECTION WITH ANY PRODUCTS OR THIS SALE.

The agreement of Seller to sell its products is expressly conditioned upon the Buyer’s assent to, and Seller agrees to sell its products only upon, all terms and conditions set forth above and on the face hereof. Buyer’s acceptance of any products provided under this sale shall constitute such assent.



35 Green Street, PO Box 653, Malden, MA 02148

Tel: (781) 321-5409 - Toll Free: (800) 343-3618 - Fax: (781) 397-8831 - (800) 787-6861

www.asahi-america.com - asahi@asahi-america.com

Direct Sales: East (800) 232-7244 / Central (800) 442-7244 / West (800) 282-7244