

WET SCRUBBER SYSTEM

Wet Scrubber Features

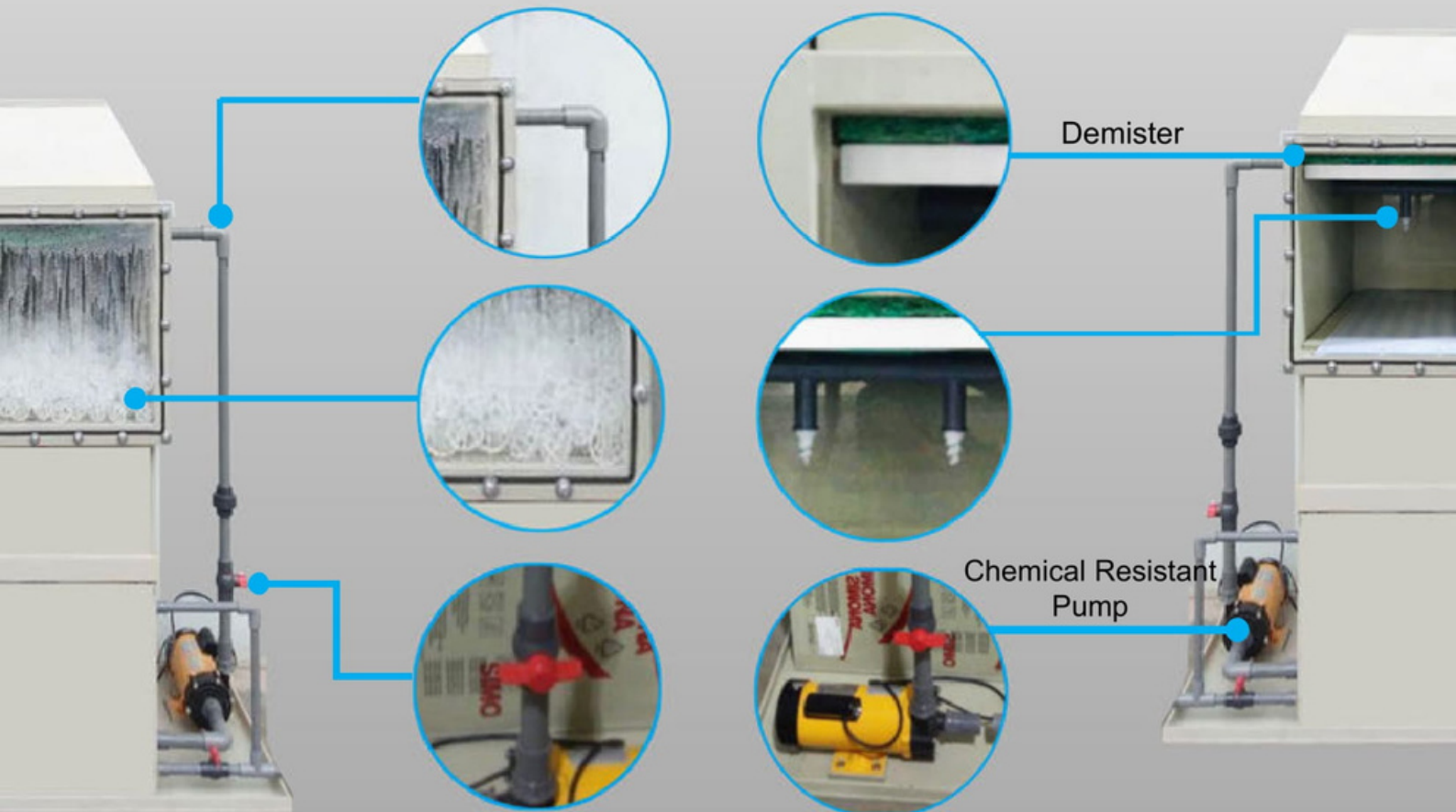


WSmini - a closed system comprising of a scrubber unit mounted above the fume hood and a holding tank below

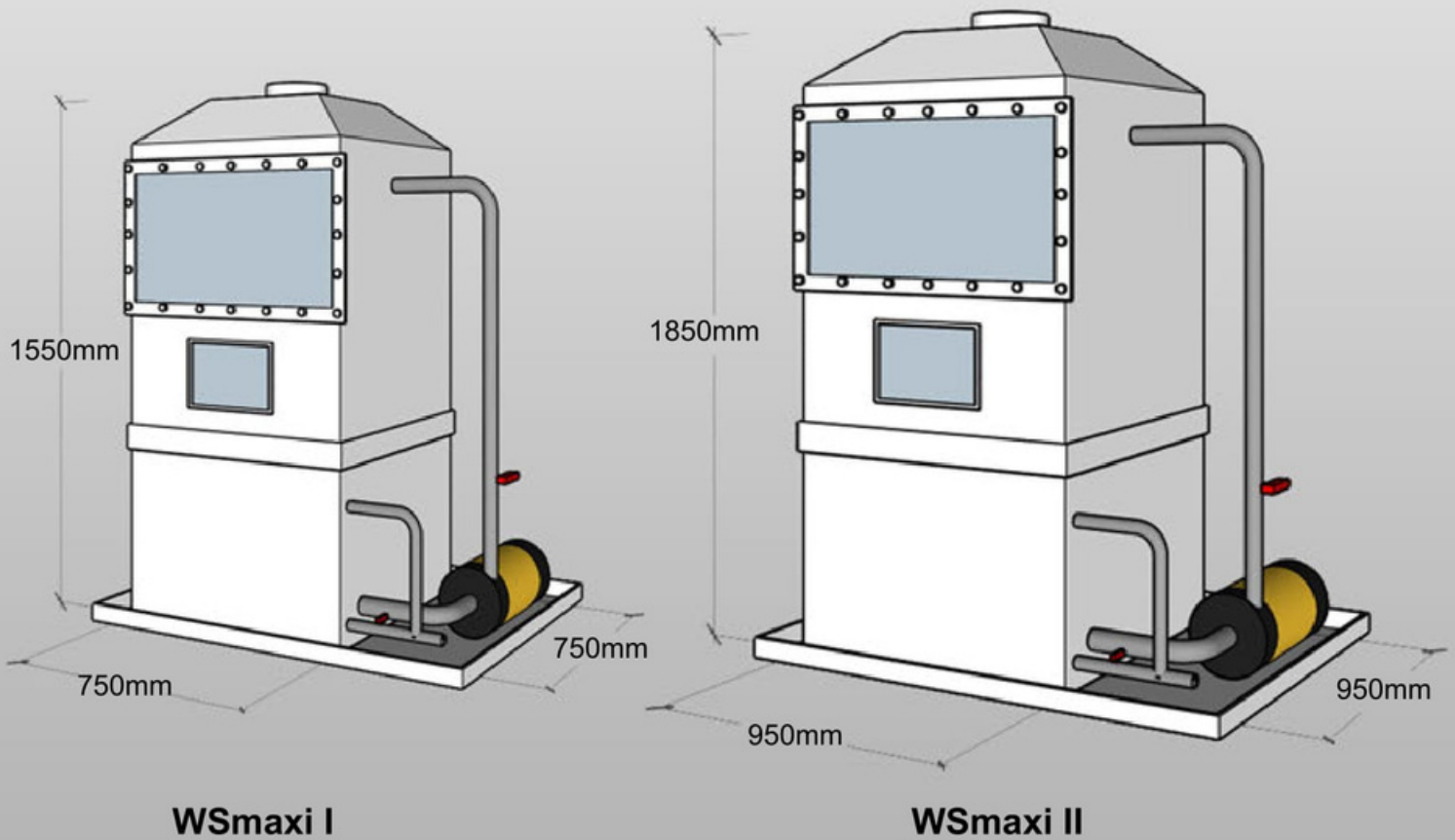
WSmaxi - a stand-alone unit that can be remotely located

WSmini can be utilised for individual hoods only. They allow flexibility and are convenient to install.

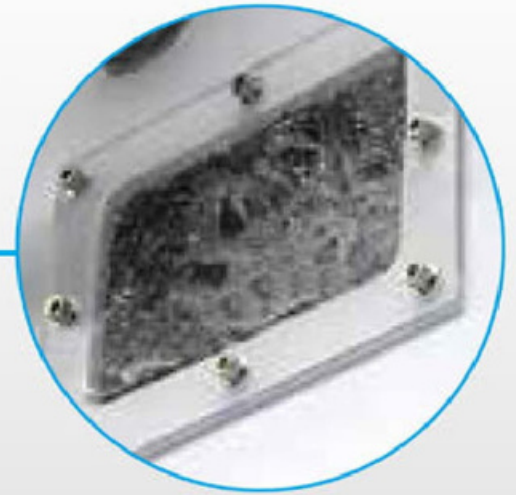
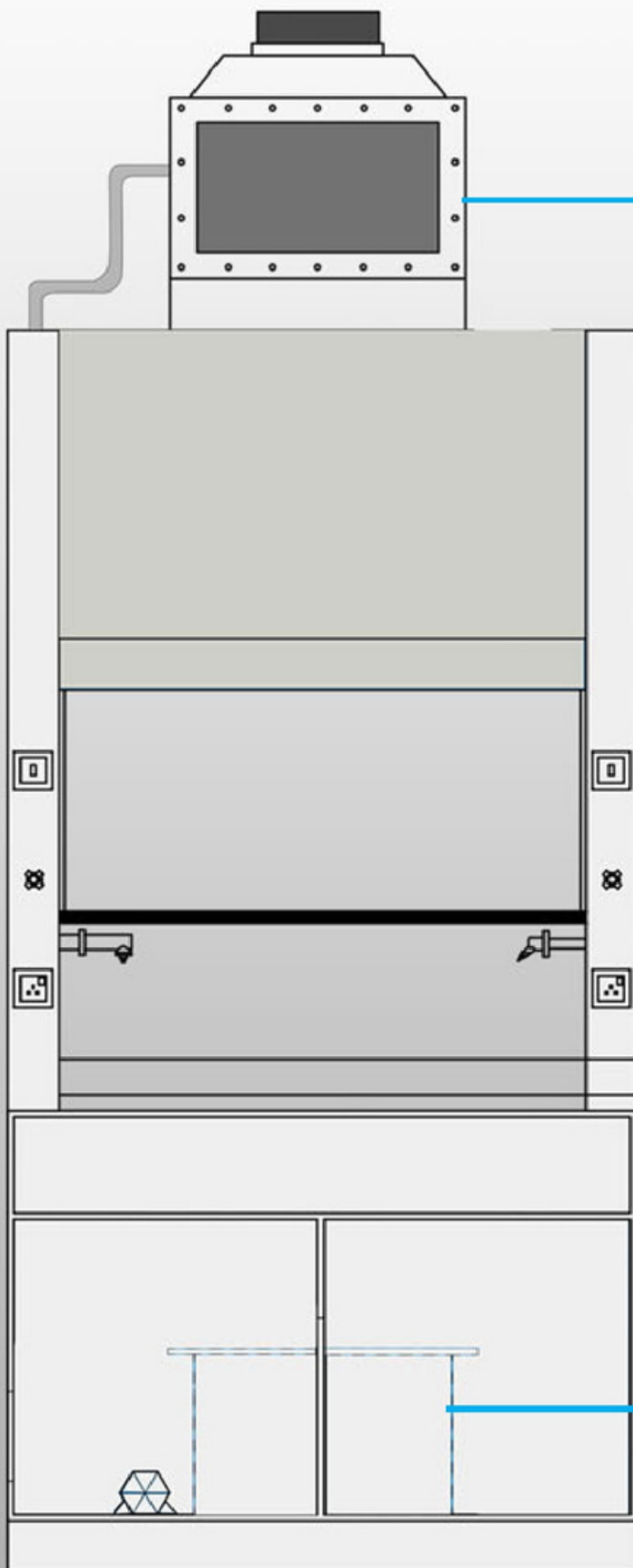
WSmaxi can be used for a series of hoods and are available in three sizes for this application.



MODEL	WSmini	WSmaxi I	WSmaxi II
Description	2 part system - Mini Scrubber - Holding Tank	Stand alone	Stand alone
Dimensions (mm) L x D x H	Mini Scrubber - 550 x 550 x 750 Holding Tank - 600 x 400 x 300	750 x 750 x 1550 Excluding skid and plumbing connections	950 x 950 x 1850 Excluding skid and plumbing connections
Viewing Window	1	2	2
Chemical Pump	Included	Included	Included



WSmini

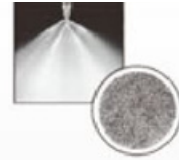


WSmini

- Mini Scrubber
- Holding Tank
- Chemical Pump



Spiral Spray Nozzle



Features and advantages

- Hollow cone spray pattern with a circular impact area
- Maximum flow through passages of any nozzle of comparable size
- Minimal clogging by largest free passage
- Proper diameter suitable for easy installation and maintenance
- Precision impact blade angles distribute drops and provide excellent coverage
- Anti-corrosion and long wear life for special materials
- Vary of installation methods

Applications:

- Dust control
- Evaporative cooling
- Flue gas desulfurization denitration
- Gas cooling
- Fire fighting purposes

Product picture



LX-SIC 120°-150°
G1/2-G4(M)



LX-SIC 90°-120°
G1/2-G4 (M)



LX-SIC-FL 60°-90°
G1-G6 Flange



LX-SIC-FL 120°-150°
G1-G6 Flange



LX-SIC-CR 60°-90°
G1-G6 Winding



LX-SIC-CR90°-120°
G1-G6 Winding



LX-SIC-CR 120°-150°
G1-G6 Winding



LX-SIC-CR 90°-120°
G1-G6 Winding



LX-CE 90°-120°
G1/4-G2(M)



LX-PVDF 90°-120°
G1/4-G2(M)



LX-PTFE 90°-120°
G1/4-G4(M)




LX-PP 90°-120°
G1/4-G2(M)

Flow parameter

Inlet Conn. (in)	Spray Angle(°) @ 7 Bar					Flow Code	Orifice Dia. Nom. (mm)	Max. Free Passage Dia. (mm)	Flow Rate Capacity (l/min)@ Bar										
	60	90	120	150	170				0.5	0.7	1	1.5	2	3	5	7	10	20	25
1/4	●	●	●			07	2.4	2.4	2.26	2.67	3.19	3.9	4.5	5.5	7.1	8.4	10.1	14.3	16.0
	●	●	●	●	●	13	3.2	3.2	4.19	4.96	5.93	7.3	8.4	10.3	13.2	15.7	18.7	26.5	30
	●	●	●	●	●	20	4.0	3.2	6.45	7.63	9.12	11.2	12.9	15.8	20.4	24	28.8	40.8	46
3/8	●					07	2.4	2.4	2.26	2.67	3.19	3.9	4.5	5.5	7.1	8.4	10.1	14.3	16.0
	●					13	3.2	3.2	4.19	4.96	5.93	7.3	8.4	10.3	13.2	15.7	18.7	26.5	30
	●					20	4.0	3.2	6.45	7.63	9.12	11.2	12.9	15.8	20.4	24	28.8	40.8	46
	●	●	●	●	●	30	4.8	3.2	9.67	11.4	13.7	16.8	19.3	24	30.6	36	43.2	61.1	68
	●	●	●	●	●	40	5.6	3.2	13.1	15.4	18.5	22	26.1	32	41.3	48	58.4	82.6	91
	●	●	●	●	●	53	6.4	3.2	17.1	20.2	24.2	30	34.2	42	54	64	76.4	108	121
	●	●	●	●	●	82	7.9	3.2	26.6	31.5	37.6	46	53.2	65	84.1	99	119	168	187
1/2	●	●	●	●	●	120	9.5	4.8	38.8	46	54.9	67	77.7	95	123	145	174	246	274
	●	●	●	●	●	164	11.1	4.8	53.2	62.9	75.2	92	106	129	168	198	238	336	374
					●	210	12.7	4.8	67.7	80.1	95.7	117	135	166	214	253	303	428	479
3/4	●	●	●	●	●	210	12.7	4.8	67.7	80.1	95.7	117	135	166	214	253	303	428	479
1	●	●	●	●	●	340	15.9	6.4	108	128	153	190	216	268	341	410	483	683	775
	●	●	●	●	●	470	19.1	6.4	153	181	216	262	306	371	484	567	685	968	1071
1-1/2	●	●	●	●	●	640	22.2	7.9	208	246	294	357	416	505	657	772	930	1320	1459
	●	●	●	●	●	820	25.4	7.9	272	322	385	458	545	647	861	989	1220	1720	1869
	●	●	●	●	●	960	28.6	7.9	309	366	438	536	619	758	978	1158	1380	1960	2188
2	●	●	●	●	●	1400	34.9	11.1	451	534	638	782	902	1105	1430	1689	2020	2850	3191
	●	●	●	●	●	1780	38.1	11.1	570	674	806	994	1140	1406	1800	2147	2550	3660	4057
3	●	●	●			2560	44.5	14.3	825	976	1170	1429	1650	2021	2610	3088	3690	5220	5835
	●	●	●			3360	50.8	14.3	1090	1290	1550	1876	2190	2653	3460	4053	4891	6920	7659
4	●	●	●			5250	63.5	15.9	1690	2000	2390	2931	3380	4145	5350	6332	7570	10700	11967

Size and weight

Nozzle	Model	Inlet Conn. (in)	A(mm)	Hex B(mm)	Net(kg)
	HHSJX (M)	1/4	42.47	15.20	0.021
		3/8	48.77	20.00	0.042
		1/2	64.96	25.20	0.070
		3/4	75.91	30.36	0.115
		1	89.42	38.44	0.174
		1-1/2	153.81	59.91	0.750
		2	175.91	66.67	1.250

To Order

$\frac{LX}{\downarrow \text{Model}} - \frac{LW/CR/FL}{\downarrow \text{Connection mode}} + \frac{1/2}{\downarrow \text{Pipe Size}} + \frac{120\ 164}{\downarrow \text{Flow code}} + \frac{316LSS}{\downarrow \text{Material}}$



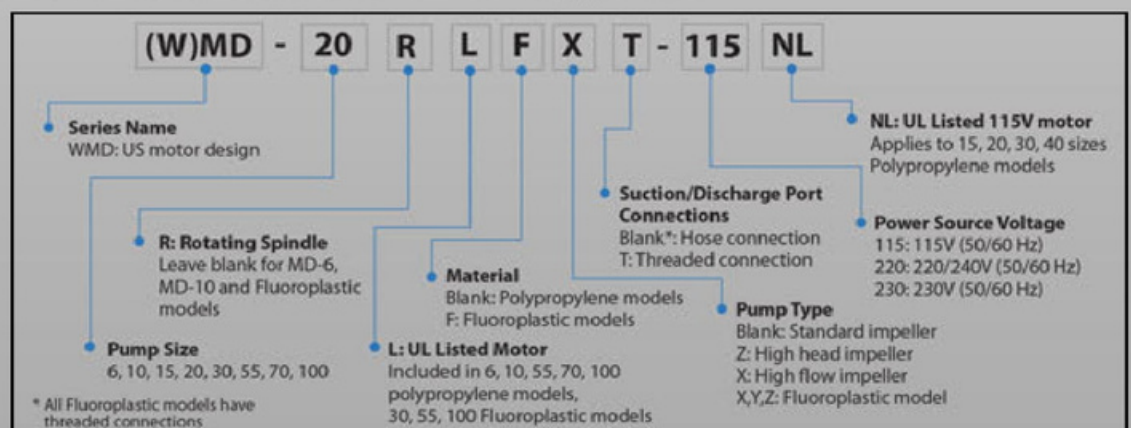
IWAKI Magnetic Drive Pump (MD Series)

Iwaki America, the world leader in small magnetically coupled centrifugal pump technology, offers the premier line of non-metallic centrifugal pumps.

- **Excellent chemical compatibility** - Manufactured from the most corrosion-resistant materials including Polypropylene, ETFE, SiC, or Alumina Ceramic to handle your most aggressive chemicals and high purity applications.
- **Motor options** - Choice of premium, high efficiency motors in AC and DC voltages.
- **Multiple impeller options** - Choose from enclosed, open or semi-open impellers to ensure a perfect hydraulic fit for your application.
- **Dual bearing system** - Leads to longer pump life.
- **Rotating spindle** - Reduces friction and heat generation.
- **Dynamically balanced drive magnet** - Reduces unbalanced loads on the motor shaft leading to longer motor life.
- **Unique internal cooling loop** - Allows for lower pump operating temperature.
- **Impeller balance holes** - Minimize axial thrust for better hydraulics.

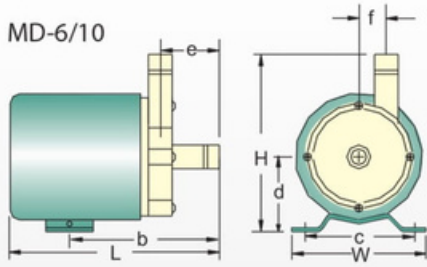


Model Code

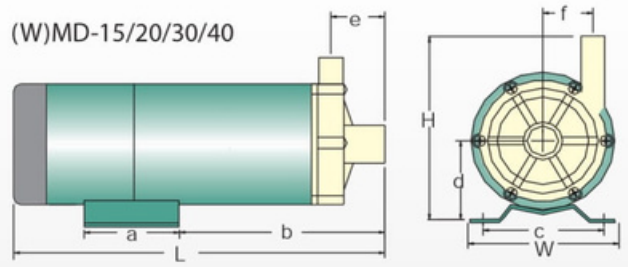


Dimensions

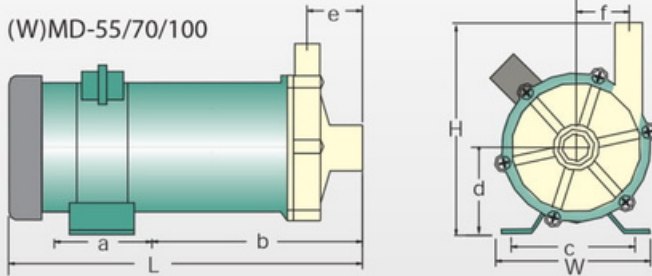
MD-6/10



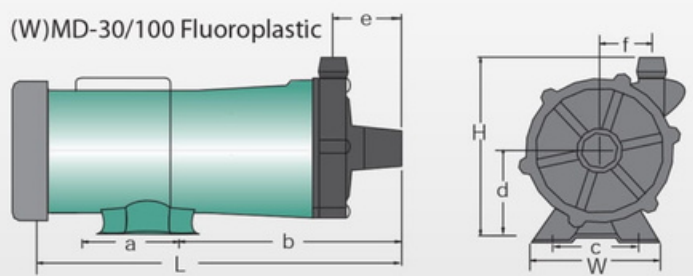
(W)MD-15/20/30/40



(W)MD-55/70/100



(W)MD-30/100 Fluoroplastic



Model	Connections		W	H	L	a	b	c	d	e	f
	Hose	NPTM									
POLYPROPYLENE (MD-115V shown)											
MD-6/10	1/2	---	2.91	3.62	4.09	1.18	2.87	2.36	1.77	1.22	0.67
WMD-15R(T)	1/2	1/2	3.50	4.26	9.46	2.37	4.15	2.50	1.94	1.52	0.85
MD-15R(T)	1/2	1/2	3.74	4.39	7.05	1.97	4.59	3.35	2.17	1.52	0.85
WMD-20R(T)	5/8	3/4	3.50	4.35	9.70	2.37	4.39	2.50	1.94	1.30	1.12
MD-20R(T)	5/8	3/4	4.17	4.19	7.99	1.73	4.05	3.54	1.77	1.52	1.12
WMD-20RX(T)	1	1	3.50	4.95	10.37	2.37	5.06	2.50	1.94	1.83	40°
MD-20RX(T)	1	1	4.17	4.75	8.66	1.73	4.45	3.54	1.74	1.83	40°
WMD-20RZ(T)	5/8	3/4	3.50	4.70	9.98	2.37	4.67	2.50	1.94	1.56	1.52
MD-20RZ(T)	5/8	3/4	4.17	4.92	8.31	1.73	4.17	3.54	2.17	1.56	1.52
WMD-30R(T)	3/4	3/4	3.50	4.70	11.65	2.37	5.72	2.50	1.94	1.89	1.22
MD-30R(T)	3/4	3/4	4.72	5.12	9.76	1.57	5.87	3.94	2.36	1.89	1.22
WMD-30RX(T)	1	1	3.50	5.09	11.89	2.37	5.96	2.50	1.94	1.97	40°
MD-30RX(T)	1	1	4.72	5.51	10.00	1.57	6.10	3.94	2.36	1.97	40°
WMD-30RZ(T)	5/8	3/4	3.50	4.70	10.97	2.37	5.04	2.50	1.94	1.56	1.53
MD-30RZ(T)	5/8	3/4	4.72	5.12	9.05	1.57	5.16	3.94	2.36	1.56	1.53
WMD-40R(T)	3/4	3/4	4.38	4.84	11.34	3.09	6.66	3.37	2.08	1.89	1.22
MD-40R(T)	3/4	3/4	4.72	5.12	9.85	1.57	5.87	3.94	2.36	1.89	1.22
WMD-40RX(T)	1	1	4.38	5.23	11.30	3.09	7.02	3.37	2.08	1.97	43°
MD-40RX(T)	1	1	4.72	5.51	10.08	1.57	6.10	3.94	2.36	1.97	43°
MD-55R (T)	1	1	4.72	6.10	10.77	1.57	7.05	3.94	2.36	2.42	1.57
MD-70R(T)	1	1	5.63	6.11	10.18	2.76	5.71	4.25	2.56	2.07	1.70
MD-70RZ (T)	3/4	3/4	5.63	6.50	9.72	2.76	5.24	4.25	2.56	1.65	1.87
MD-100R(T)	1	1	6.14	6.89	12.67	2.76	6.38	4.33	2.95	2.55	1.71
WMD-100R(T)	1	1	*	7.44	*	3.00	10.43	4.87	3.50	2.55	1.71
FLUOROPLASTIC (MD-115V shown)											
WMD-30F(X,Y,Z)	---	1/2	3.50	5.02	11.82	2.37	6.67	2.62	2.29	1.84	1.22
MD-30(X,Y,Z)	---	1/2	4.72	5.12	9.09	1.57	6.77	3.94	2.36	1.53	1.52
MD-55F (Y,Z)	---	1	4.72	6.11	10.53	1.57	6.61	3.94	2.56	2.30	1.56
WMD-100F (Y,Z)	---	1	*	6.80	*	3.00	12.05	4.88	3.56	2.55	1.71
MD-100F (Y,Z)	---	1	6.14	6.89	12.67	2.76	6.38	4.33	2.95	2.55	1.71