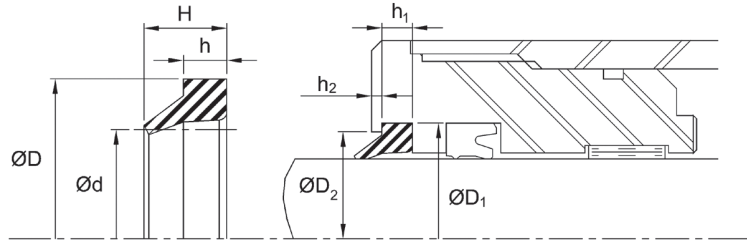
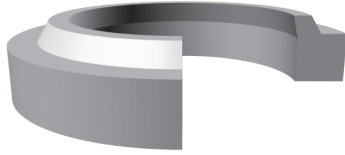


WC/U - Rod Wipers

Polyurethane AU 90A



Temperature: -40/212F [-40/100C]

Pressure: N/A

Ref.Number	Rod diameter		Nominal Seal Dimensions				Housing Dimensions							
		Tol.	d	D	h	H	D1	Tol.	D2	Tol.	h1	Tol.	h2	Tol.
W004012028WC/U	4.00	+0.00 / -0.04	4.00	12.00	2.80		12.00	+0.08 / -0.00	9.00	+0.08 / -0.00	3.00	+0.10 / -0.00	1.00	+0.20 / -0.20
W005012026WC/U	5.00	+0.00 / -0.04	5.00	12.00	2.60		12.00	+0.08 / -0.00	9.00	+0.08 / -0.00	2.80	+0.10 / -0.00	1.00	+0.20 / -0.20
W006012028WC/U	6.00	+0.00 / -0.04	6.00	12.00	2.80		12.00	+0.08 / -0.00	9.00	+0.08 / -0.00	3.00	+0.10 / -0.00	1.00	+0.20 / -0.20
W008014035WC/U	8.00	+0.00 / -0.04	8.00	14.00	3.50		14.60	+0.08 / -0.00	11.00	+0.08 / -0.00	3.80	+0.10 / -0.00	2.00	+0.20 / -0.20
W009013023WC/U	9.00	+0.00 / -0.04	9.00	13.00	2.30		13.00	+0.08 / -0.00	12.00	+0.08 / -0.00	2.50	+0.10 / -0.00	1.00	+0.20 / -0.20
W010015008WC/U	10.00	+0.00 / -0.04	10.00	15.00	0.80		15.00	+0.08 / -0.00	13.00	+0.08 / -0.00	1.00	+0.10 / -0.00	1.00	+0.20 / -0.20
W010016035WC/U	10.00	+0.00 / -0.04	10.00	16.00	3.50		16.60	+0.08 / -0.00	13.00	+0.08 / -0.00	3.80	+0.10 / -0.00	2.00	+0.20 / -0.20
W012018035WC/U	12.00	+0.00 / -0.04	12.00	18.00	3.50		18.60	+0.08 / -0.00	15.00	+0.08 / -0.00	3.80	+0.10 / -0.00	2.00	+0.20 / -0.20
W014020035WC/U	14.00	+0.00 / -0.04	14.00	20.00	3.50		20.60	+0.08 / -0.00	17.00	+0.08 / -0.00	3.80	+0.10 / -0.00	2.00	+0.20 / -0.20
W015021035WC/U	15.00	+0.00 / -0.04	15.00	21.00	3.50		21.60	+0.08 / -0.00	18.00	+0.08 / -0.00	3.80	+0.10 / -0.00	2.00	+0.20 / -0.20
W015027050WC/U	15.00	+0.00 / -0.04	15.00	27.00	5.00		27.00	+0.08 / -0.00	24.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W016022028WC/U	16.00	+0.00 / -0.04	16.00	22.00	2.80		22.50	+0.08 / -0.00	19.00	+0.08 / -0.00	3.00	+0.10 / -0.00	1.00	+0.20 / -0.20
W018024035WC/U	18.00	+0.00 / -0.04	18.00	24.00	3.50		24.60	+0.08 / -0.00	21.00	+0.08 / -0.00	3.80	+0.10 / -0.00	2.00	+0.20 / -0.20
W018024050WC/U	18.00	+0.00 / -0.04	18.00	24.00	5.00		24.00	+0.08 / -0.00	21.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W020026032WC/U	20.00	+0.00 / -0.04	20.00	26.00	3.20		26.00	+0.08 / -0.00	23.00	+0.08 / -0.00	3.40	+0.10 / -0.00	2.00	+0.20 / -0.20
W020028050WC/U	20.00	+0.00 / -0.04	20.00	28.00	5.00		28.60	+0.08 / -0.00	23.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W020030050WC/U	20.00	+0.00 / -0.04	20.00	30.00	5.00		30.00	+0.08 / -0.00	27.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W022030020WC/U	22.00	+0.00 / -0.04	22.00	30.00	2.00		30.60	+0.08 / -0.00	25.00	+0.08 / -0.00	2.20	+0.10 / -0.00	1.00	+0.20 / -0.20



NOTE: MINIMUM LINE ORDER MAY APPLY

WC/U SERIES - AU 90A

**METRIC SIZE
ROD WIPERS**

Ref.Number	Rod diameter		Nominal Seal Dimensions				Housing Dimensions							
		Tol.	d	D	h	H	D1	Tol.	D2	Tol.	h1	Tol.	h2	Tol.
W022030050WC/U	22.00	+0.00 / -0.04	22.00	30.00	5.00		30.60	+0.08 / -0.00	25.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W024032020WC/U	24.00	+0.00 / -0.04	24.00	32.00	2.00		32.60	+0.08 / -0.00	27.00	+0.08 / -0.00	2.20	+0.10 / -0.00	1.00	+0.20 / -0.20
W024032050WC/U	24.00	+0.00 / -0.04	24.00	32.00	5.00		32.60	+0.08 / -0.00	27.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W025033050WC/U	25.00	+0.00 / -0.04	25.00	33.00	5.00		33.60	+0.08 / -0.00	28.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W028036050WC/U	28.00	+0.00 / -0.04	28.00	36.00	5.00		36.60	+0.08 / -0.00	31.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W030038050WC/U	30.00	+0.00 / -0.04	30.00	38.00	5.00		38.60	+0.08 / -0.00	33.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W030040028WC/U	30.00	+0.00 / -0.04	30.00	40.00	2.80		40.00	+0.08 / -0.00	34.50	+0.08 / -0.00	3.00	+0.10 / -0.00	1.00	+0.20 / -0.20
W030041070WC/U	30.00	+0.00 / -0.05	30.00	41.00	7.00		41.20	+0.08 / -0.00	37.00	+0.08 / -0.00	7.20	+0.10 / -0.00	2.50	+0.20 / -0.20
W032040035WC/U	32.00	+0.00 / -0.04	32.00	40.00	3.50		40.00	+0.08 / -0.00	35.00	+0.08 / -0.00	3.70	+0.10 / -0.00	2.00	+0.20 / -0.20
W032040050WC/U	32.00	+0.00 / -0.04	32.00	40.00	5.00		40.60	+0.08 / -0.00	35.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W035040035WC/U	35.00	+0.00 / -0.04	35.00	40.00	3.50		40.00	+0.08 / -0.00	37.00	+0.08 / -0.00	3.70	+0.10 / -0.00	2.00	+0.20 / -0.20
W035043050WC/U	35.00	+0.00 / -0.04	35.00	43.00	5.00		43.60	+0.08 / -0.00	38.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W035045038WC/U	35.00	+0.00 / -0.04	35.00	45.00	3.80		45.00	+0.08 / -0.00	39.00	+0.08 / -0.00	4.00	+0.10 / -0.00	2.00	+0.20 / -0.20
W036044050WC/U	36.00	+0.00 / -0.04	36.00	44.00	5.00		44.60	+0.08 / -0.00	39.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W038046050WC/U	38.00	+0.00 / -0.04	38.00	46.00	5.00		46.60	+0.08 / -0.00	41.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W038048046WC/U	38.00	+0.00 / -0.04	38.00	48.00	4.60		48.50	+0.08 / -0.00	41.00	+0.08 / -0.00	4.80	+0.10 / -0.00	2.00	+0.20 / -0.20
W040048050WC/U	40.00	+0.00 / -0.05	40.00	48.00	5.00		48.60	+0.08 / -0.00	43.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W041049050WC/U	41.30	+0.00 / -0.05	41.30	49.30	5.00		49.30	+0.08 / -0.00	46.80	+0.08 / -0.00	5.30	+0.10 / -0.00	3.00	+0.20 / -0.20
W042050050WC/U	42.00	+0.00 / -0.05	42.00	50.00	5.00		50.60	+0.08 / -0.00	45.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W045053050WC/U	45.00	+0.00 / -0.05	45.00	53.00	5.00		53.60	+0.08 / -0.00	48.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W045055050WC/U	45.00	+0.00 / -0.05	45.00	55.00	5.00		55.60	+0.08 / -0.00	48.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W045060040WC/U	45.00	+0.00 / -0.05	45.00	60.00	4.00		60.00	+0.08 / -0.00	53.00	+0.08 / -0.00	4.20	+0.10 / -0.00	2.00	+0.20 / -0.20
W046054050WC/U	46.00	+0.00 / -0.05	46.00	54.00	5.00		54.60	+0.08 / -0.00	49.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W047055050WC/U	47.00	+0.00 / -0.05	47.00	55.00	5.00		55.60	+0.08 / -0.00	50.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W050058050WC/U	50.00	+0.00 / -0.05	50.00	58.00	5.00		58.60	+0.08 / -0.00	53.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W050060050WC/U	50.00	+0.00 / -0.05	50.00	60.00	5.00		60.60	+0.08 / -0.00	54.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W050065040WC/U	50.00	+0.00 / -0.05	50.00	65.00	4.00		65.50	+0.08 / -0.00	58.00	+0.08 / -0.00	4.20	+0.10 / -0.00	2.00	+0.20 / -0.20
W053061050WC/U	53.00	+0.00 / -0.05	53.00	61.00	5.00		61.60	+0.08 / -0.00	56.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W055063050WC/U	55.00	+0.00 / -0.05	55.00	63.00	5.00		63.60	+0.08 / -0.00	58.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W055065050WC/U	55.00	+0.00 / -0.05	55.00	65.00	5.00		65.60	+0.08 / -0.00	59.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W056064050WC/U	56.00	+0.00 / -0.05	56.00	64.00	5.00		64.60	+0.08 / -0.00	59.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W056066050WC/U	56.00	+0.00 / -0.05	56.00	66.00	5.00		66.60	+0.08 / -0.00	59.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W056066060WC/U	56.00	+0.00 / -0.05	56.00	66.00	6.00		66.00	+0.08 / -0.00	63.00	+0.08 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W060068050WC/U	60.00	+0.00 / -0.05	60.00	68.00	5.00		68.60	+0.08 / -0.00	63.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W060070050WC/U	60.00	+0.00 / -0.05	60.00	70.00	5.00		70.60	+0.08 / -0.00	63.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W060070060WC/U	60.00	+0.00 / -0.05	60.00	70.00	6.00		70.00	+0.08 / -0.00	67.00	+0.08 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W061069050WC/U	61.00	+0.00 / -0.05	61.00	69.00	5.00		69.60	+0.08 / -0.00	64.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W063071050WC/U	63.00	+0.00 / -0.05	63.00	71.00	5.00		71.60	+0.08 / -0.00	66.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W063073050WC/U	63.00	+0.00 / -0.05	63.00	73.00	5.00		73.60	+0.08 / -0.00	66.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W063073060WC/U	63.00	+0.00 / -0.05	63.00	73.00	6.00		73.00	+0.08 / -0.00	70.00	+0.08 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W065073050WC/U	65.00	+0.00 / -0.06	65.00	73.00	5.00		73.60	+0.08 / -0.00	68.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W065075050WC/U	65.00	+0.00 / -0.06	65.00	75.00	5.00		75.60	+0.08 / -0.00	68.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W065075060WC/U	65.00	+0.00 / -0.06	65.00	75.00	6.00		75.00	+0.08 / -0.00	72.00	+0.08 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W065076058WC/U	65.00	+0.00 / -0.06	65.00	76.00	5.80		76.60	+0.08 / -0.00	71.50	+0.08 / -0.00	6.00	+0.10 / -0.00	2.00	+0.20 / -0.20
W067076053WC/U	67.00	+0.00 / -0.06	67.00	76.00	5.30		76.60	+0.08 / -0.00	71.00	+0.08 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W070078040WC/U	70.00	+0.00 / -0.06	70.00	78.00	4.00		78.60	+0.08 / -0.00	73.00	+0.08 / -0.00	4.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W070078050WC/U	70.00	+0.00 / -0.06	70.00	78.00	5.00		78.60	+0.10 / -0.00	73.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20

NOTE: MINIMUM LINE ORDER MAY APPLY



WC/U SERIES - AU 90A

Ref.Number	Rod diameter		Nominal Seal Dimensions				Housing Dimensions							
		Tol.	d	D	h	H	D1	Tol.	D2	Tol.	h1	Tol.	h2	Tol.
W070080050WC/U	70.00	+0.00 / -0.06	70.00	80.00	5.00		80.60	+0.10 / -0.00	73.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W070080060WC/U	70.00	+0.00 / -0.06	70.00	80.00	6.00		80.00	+0.10 / -0.00	77.00	+0.10 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W070080068WC/U	70.00	+0.00 / -0.06	70.00	80.00	6.80		80.00	+0.10 / -0.00	74.00	+0.08 / -0.00	7.00	+0.10 / -0.00	4.50	+0.20 / -0.20
W070082070WC/U	70.00	+0.00 / -0.06	70.00	82.00	7.00		82.20	+0.10 / -0.00	76.00	+0.08 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W073081050WC/U	73.00	+0.00 / -0.06	73.00	81.00	5.00		81.60	+0.10 / -0.00	76.00	+0.08 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W073083071WC/U	73.00	+0.00 / -0.06	73.00	83.00	7.10		83.60	+0.10 / -0.00	76.00	+0.08 / -0.00	7.30	+0.10 / -0.00	5.00	+0.20 / -0.20
W075083050WC/U	75.00	+0.00 / -0.06	75.00	83.00	5.00		83.60	+0.10 / -0.00	78.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W075085060WC/U	75.00	+0.00 / -0.06	75.00	85.00	6.00		85.00	+0.10 / -0.00	82.00	+0.10 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W075087070WC/U	75.00	+0.00 / -0.06	75.00	87.00	7.00		87.20	+0.10 / -0.00	81.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W076084050WC/U	76.00	+0.00 / -0.06	76.00	84.00	5.00		84.60	+0.10 / -0.00	79.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W078086050WC/U	78.00	+0.00 / -0.06	78.00	86.00	5.00		86.00	+0.10 / -0.00	81.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W078088053WC/U	78.00	+0.00 / -0.06	78.00	88.00	5.30		88.60	+0.10 / -0.00	84.50	+0.10 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W078092070WC/U	78.00	+0.00 / -0.06	78.00	92.00	7.00		92.20	+0.10 / -0.00	85.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W080088050WC/U	80.00	+0.00 / -0.09	80.00	88.00	5.00		88.60	+0.10 / -0.00	83.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W080090060WC/U	80.00	+0.00 / -0.09	80.00	90.00	6.00		90.00	+0.10 / -0.00	87.00	+0.10 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W080091073WC/U	80.00	+0.00 / -0.09	80.00	91.00	7.30		91.00	+0.10 / -0.00	85.00	+0.10 / -0.00	7.50	+0.10 / -0.00	3.50	+0.20 / -0.20
W080092070WC/U	80.00	+0.00 / -0.09	80.00	92.00	7.00		92.20	+0.10 / -0.00	86.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W085093050WC/U	85.00	+0.00 / -0.09	85.00	93.00	5.00		93.60	+0.10 / -0.00	88.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W085097070WC/U	85.00	+0.00 / -0.09	85.00	97.00	7.00		97.20	+0.10 / -0.00	91.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W085098073WC/U	85.00	+0.00 / -0.09	85.00	98.00	7.30		98.00	+0.10 / -0.00	92.00	+0.10 / -0.00	7.50	+0.10 / -0.00	4.00	+0.20 / -0.20
W088096050WC/U	88.00	+0.00 / -0.09	88.00	96.00	5.00		96.60	+0.10 / -0.00	91.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W088100070WC/U	88.00	+0.00 / -0.09	88.00	100.00	7.00		100.20	+0.10 / -0.00	94.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W090098050WC/U	90.00	+0.00 / -0.09	90.00	98.00	5.00		98.60	+0.10 / -0.00	93.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W090100060WC/U	90.00	+0.00 / -0.09	90.00	100.00	6.00		100.00	+0.10 / -0.00	97.00	+0.10 / -0.00	6.30	+0.10 / -0.00	3.70	+0.20 / -0.20
W090100068WC/U	90.00	+0.00 / -0.09	90.00	100.00	6.80		100.00	+0.10 / -0.00	94.00	+0.10 / -0.00	7.00	+0.10 / -0.00	4.50	+0.20 / -0.20
W090102058WC/U	90.00	+0.00 / -0.09	90.00	102.00	5.80		102.00	+0.10 / -0.00	94.00	+0.10 / -0.00	6.00	+0.10 / -0.00	2.00	+0.20 / -0.20
W090102070WC/U	90.00	+0.00 / -0.09	90.00	102.00	7.00		102.20	+0.10 / -0.00	96.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W091099050WC/U	91.00	+0.00 / -0.09	91.00	99.00	5.00		99.60	+0.10 / -0.00	94.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W092103053WC/U	92.00	+0.00 / -0.09	92.00	103.00	5.30		103.60	+0.10 / -0.00	97.00	+0.10 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W095105100WC/U	95.00	+0.00 / -0.09	95.00	105.00	10.00		105.00	+0.10 / -0.00	99.00	+0.10 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W095107070WC/U	95.00	+0.00 / -0.09	95.00	107.00	7.00		107.20	+0.10 / -0.00	101.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W097105050WC/U	97.00	+0.00 / -0.09	97.00	105.00	5.00		105.00	+0.10 / -0.00	100.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W100108050WC/U	100.00	+0.00 / -0.09	100.00	108.00	5.00		108.60	+0.10 / -0.00	103.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W100110050WC/U	100.00	+0.00 / -0.09	100.00	110.00	5.00		110.60	+0.10 / -0.00	104.00	+0.10 / -0.00	5.30	+0.10 / -0.00	1.70	+0.20 / -0.20
W100112058WC/U	100.00	+0.00 / -0.09	100.00	112.00	5.80		112.20	+0.10 / -0.00	104.00	+0.10 / -0.00	6.00	+0.10 / -0.00	2.00	+0.20 / -0.20
W100112070WC/U	100.00	+0.00 / -0.09	100.00	112.00	7.00		112.20	+0.10 / -0.00	106.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W100115090WC/U	100.00	+0.00 / -0.09	100.00	115.00	9.00		115.00	+0.10 / -0.00	110.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W105113050WC/U	105.00	+0.00 / -0.13	105.00	113.00	5.00		113.60	+0.10 / -0.00	108.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W105117070WC/U	105.00	+0.00 / -0.13	105.00	117.00	7.00		117.20	+0.10 / -0.00	111.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W105120070WC/U	105.00	+0.00 / -0.13	105.00	120.00	7.00		120.00	+0.10 / -0.00	112.00	+0.10 / -0.00	7.20	+0.10 / -0.00	4.80	+0.20 / -0.20
W110122070WC/U	110.00	+0.00 / -0.13	110.00	122.00	7.00		122.20	+0.10 / -0.00	116.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W110125090WC/U	110.00	+0.00 / -0.13	110.00	125.00	9.00		125.00	+0.10 / -0.00	120.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W112124070WC/U	112.00	+0.00 / -0.13	112.00	124.00	7.00		124.20	+0.10 / -0.00	118.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W115127070WC/U	115.00	+0.00 / -0.13	115.00	127.00	7.00		127.20	+0.10 / -0.00	121.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W115127100WC/U	115.00	+0.00 / -0.13	115.00	127.00	10.00		127.00	+0.10 / -0.00	121.00	+0.10 / -0.00	10.00	+0.10 / -0.00	8.00	+0.20 / -0.20
W118126050WC/U	118.00	+0.00 / -0.13	118.00	126.00	5.00		126.00	+0.10 / -0.00	121.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W120128050WC/U	120.00	+0.00 / -0.13	120.00	128.00	5.00		128.60	+0.10 / -0.00	123.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20

NOTE: MINIMUM LINE ORDER MAY APPLY



WC/U SERIES - AU 90A

Ref.Number	Rod diameter		Nominal Seal Dimensions				Housing Dimensions							
		Tol.	d	D	h	H	D1	Tol.	D2	Tol.	h1	Tol.	h2	Tol.
W120130053WC/U	120.00	+0.00 / -0.13	120.00	130.00	5.30		130.60	+0.10 / -0.00	126.50	+0.10 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W120132070WC/U	120.00	+0.00 / -0.13	120.00	132.00	7.00		132.20	+0.10 / -0.00	126.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W120135090WC/U	120.00	+0.00 / -0.13	120.00	135.00	9.00		135.00	+0.10 / -0.00	130.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W125133050WC/U	125.00	+0.00 / -0.13	125.00	133.00	5.00		133.00	+0.10 / -0.00	130.80	+0.10 / -0.00	5.30	+0.10 / -0.00	1.70	+0.20 / -0.20
W125137070WC/U	125.00	+0.00 / -0.13	125.00	137.00	7.00		137.20	+0.10 / -0.00	131.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W125140090WC/U	125.00	+0.00 / -0.13	125.00	140.00	9.00		140.00	+0.10 / -0.00	135.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W125140100WC/U	125.00	+0.00 / -0.13	125.00	140.00	10.00		140.00	+0.10 / -0.00	132.60	+0.10 / -0.00	10.20	+0.10 / -0.00	6.00	+0.20 / -0.20
W128140070WC/U	128.00	+0.00 / -0.13	128.00	140.00	7.00		140.20	+0.10 / -0.00	134.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W128143090WC/U	128.00	+0.00 / -0.13	128.00	143.00	9.00		143.00	+0.10 / -0.00	138.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W130142070WC/U	130.00	+0.00 / -0.13	130.00	142.00	7.00		142.20	+0.10 / -0.00	136.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W132144070WC/U	132.00	+0.00 / -0.13	132.00	144.00	7.00		144.20	+0.10 / -0.00	138.00	+0.10 / -0.00	7.20	+0.10 / -0.00	4.80	+0.20 / -0.20
W135147070WC/U	135.00	+0.00 / -0.13	135.00	147.00	7.00		147.20	+0.10 / -0.00	141.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W135150090WC/U	135.00	+0.00 / -0.13	135.00	150.00	9.00		150.00	+0.10 / -0.00	145.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W140148050WC/U	140.00	+0.00 / -0.13	140.00	148.00	5.00		148.60	+0.10 / -0.00	143.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W140148058WC/U	140.00	+0.00 / -0.13	140.00	148.00	5.80		148.60	+0.10 / -0.00	143.00	+0.10 / -0.00	6.00	+0.10 / -0.00	2.00	+0.20 / -0.20
W140152070WC/U	140.00	+0.00 / -0.13	140.00	152.00	7.00		152.20	+0.10 / -0.00	146.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W140155090WC/U	140.00	+0.00 / -0.13	140.00	155.00	9.00		155.00	+0.10 / -0.00	147.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W140155100WC/U	140.00	+0.00 / -0.13	140.00	155.00	10.00		155.00	+0.10 / -0.00	147.60	+0.10 / -0.00	10.20	+0.10 / -0.00	6.00	+0.20 / -0.20
W141151053WC/U	141.00	+0.00 / -0.13	141.00	151.00	5.30		151.60	+0.10 / -0.00	147.50	+0.10 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W143151050WC/U	143.00	+0.00 / -0.13	143.00	151.00	5.00		151.00	+0.10 / -0.00	146.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W145157070WC/U	145.00	+0.00 / -0.13	145.00	157.00	7.00		157.20	+0.10 / -0.00	151.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W145160078WC/U	145.00	+0.00 / -0.13	145.00	160.00	7.80		160.00	+0.10 / -0.00	152.00	+0.10 / -0.00	8.00	+0.10 / -0.00	5.00	+0.20 / -0.20
W145160090WC/U	145.00	+0.00 / -0.13	145.00	160.00	9.00		160.00	+0.10 / -0.00	155.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W148160068WC/U	148.00	+0.00 / -0.13	148.00	160.00	6.80		160.00	+0.10 / -0.00	152.00	+0.10 / -0.00	7.00	+0.10 / -0.00	4.50	+0.20 / -0.20
W150162070WC/U	150.00	+0.00 / -0.13	150.00	162.00	7.00		162.20	+0.10 / -0.00	156.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W150165073WC/U	150.00	+0.00 / -0.13	150.00	165.00	7.30		165.00	+0.10 / -0.00	156.00	+0.10 / -0.00	7.50	+0.10 / -0.00	5.00	+0.20 / -0.20
W150165100WC/U	150.00	+0.00 / -0.13	150.00	165.00	10.00		165.00	+0.10 / -0.00	157.60	+0.10 / -0.00	10.20	+0.10 / -0.00	6.00	+0.20 / -0.20
W150166078WC/U	150.00	+0.00 / -0.13	150.00	166.00	7.80		166.00	+0.10 / -0.00	161.00	+0.10 / -0.00	8.00	+0.10 / -0.00	4.00	+0.20 / -0.20
W155163050WC/U	155.00	+0.00 / -0.13	155.00	163.00	5.00		163.00	+0.10 / -0.00	160.50	+0.10 / -0.00	5.30	+0.10 / -0.00	3.00	+0.20 / -0.20
W155167070WC/U	155.00	+0.00 / -0.13	155.00	167.00	7.00		167.20	+0.10 / -0.00	161.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W155175100WC/U	155.00	+0.00 / -0.13	155.00	175.00	10.00		175.00	+0.10 / -0.00	165.00	+0.10 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W160168050WC/U	160.00	+0.00 / -0.13	160.00	168.00	5.00		168.60	+0.10 / -0.00	163.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W160172070WC/U	160.00	+0.00 / -0.13	160.00	172.00	7.00		172.20	+0.10 / -0.00	166.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W160175090WC/U	160.00	+0.00 / -0.13	160.00	175.00	9.00		175.00	+0.10 / -0.00	170.00	+0.10 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W160175100WC/U	160.00	+0.00 / -0.13	160.00	175.00	10.00		175.00	+0.13 / -0.00	168.00	+0.13 / -0.00	10.20	+0.10 / -0.00	6.00	+0.20 / -0.20
W162172053WC/U	162.00	+0.00 / -0.13	162.00	172.00	5.30		172.60	+0.13 / -0.00	168.00	+0.10 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W163175070WC/U	163.00	+0.00 / -0.13	163.00	175.00	7.00		175.20	+0.13 / -0.00	169.00	+0.10 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W165177070WC/U	165.00	+0.00 / -0.13	165.00	177.00	7.00		177.20	+0.13 / -0.00	171.00	+0.13 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W165180090WC/U	165.00	+0.00 / -0.13	165.00	180.00	9.00		180.00	+0.13 / -0.00	175.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W165180100WC/U	165.00	+0.00 / -0.13	165.00	180.00	10.00		180.00	+0.13 / -0.00	173.00	+0.13 / -0.00	10.20	+0.10 / -0.00	6.00	+0.20 / -0.20
W170178050WC/U	170.00	+0.00 / -0.13	170.00	178.00	5.00		178.60	+0.13 / -0.00	173.00	+0.10 / -0.00	5.30	+0.10 / -0.00	2.00	+0.20 / -0.20
W170182075WC/U	170.00	+0.00 / -0.13	170.00	182.00	7.50		182.20	+0.13 / -0.00	176.00	+0.13 / -0.00	7.70	+0.10 / -0.00	4.30	+0.20 / -0.20
W170185100WC/U	170.00	+0.00 / -0.13	170.00	185.00	10.00		185.20	+0.13 / -0.00	178.00	+0.13 / -0.00	10.20	+0.10 / -0.00	6.00	+0.20 / -0.20
W175187070WC/U	175.00	+0.00 / -0.13	175.00	187.00	7.00		187.20	+0.13 / -0.00	181.00	+0.13 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W177192090WC/U	177.00	+0.00 / -0.13	177.00	192.00	9.00		192.00	+0.13 / -0.00	187.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W180195090WC/U	180.00	+0.00 / -0.13	180.00	195.00	9.00		195.00	+0.13 / -0.00	190.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W180195100WC/U	180.00	+0.00 / -0.13	180.00	195.00	10.00		195.00	+0.13 / -0.00	188.00	+0.13 / -0.00	10.20	+0.10 / -0.00	6.00	+0.20 / -0.20

NOTE: MINIMUM LINE ORDER MAY APPLY

**METRIC SIZE
ROD WIPERS**



WC/U SERIES - AU 90A

Ref.Number	Rod diameter		Nominal Seal Dimensions				Housing Dimensions							
		Tol.	d	D	h	H	D1	Tol.	D2	Tol.	h1	Tol.	h2	Tol.
W180200068WC/U	180.00	+0.00 / -0.13	180.00	200.00	6.80		200.00	+0.13 / -0.00	188.00	+0.13 / -0.00	7.00	+0.10 / -0.00	4.50	+0.20 / -0.20
W180200100WC/U	180.00	+0.00 / -0.13	180.00	200.00	10.00		200.00	+0.13 / -0.00	190.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W183193053WC/U	183.00	+0.00 / -0.13	183.00	193.00	5.30		193.60	+0.13 / -0.00	189.00	+0.13 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W188200070WC/U	188.00	+0.00 / -0.13	188.00	200.00	7.00		200.20	+0.13 / -0.00	194.00	+0.13 / -0.00	7.20	+0.10 / -0.00	5.00	+0.20 / -0.20
W190205100WC/U	190.00	+0.00 / -0.13	190.00	205.00	10.00		205.20	+0.13 / -0.00	198.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W190210100WC/U	190.00	+0.00 / -0.13	190.00	210.00	10.00		210.00	+0.13 / -0.00	200.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W200208050WC/U	200.00	+0.00 / -0.13	200.00	208.00	5.00		208.60	+0.13 / -0.00	203.00	+0.13 / -0.00	5.30	+0.10 / -0.00	1.70	+0.20 / -0.20
W200215090WC/U	200.00	+0.00 / -0.13	200.00	215.00	9.00		215.00	+0.13 / -0.00	210.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W200215100WC/U	200.00	+0.00 / -0.13	200.00	215.00	10.00		215.20	+0.13 / -0.00	208.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W200220100WC/U	200.00	+0.00 / -0.13	200.00	220.00	10.00		220.00	+0.13 / -0.00	210.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W205220090WC/U	205.00	+0.00 / -0.13	205.00	220.00	9.00		220.00	+0.13 / -0.00	215.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W210225090WC/U	210.00	+0.00 / -0.13	210.00	225.00	9.00		225.00	+0.13 / -0.00	220.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W210225100WC/U	210.00	+0.00 / -0.13	210.00	225.00	10.00		225.20	+0.13 / -0.00	218.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W210226078WC/U	210.00	+0.00 / -0.13	210.00	226.00	7.80		226.00	+0.13 / -0.00	221.00	+0.13 / -0.00	8.00	+0.10 / -0.00	4.00	+0.20 / -0.20
W210230100WC/U	210.00	+0.00 / -0.13	210.00	230.00	10.00		230.00	+0.13 / -0.00	220.00	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W212232120WC/U	212.00	+0.00 / -0.13	212.00	232.00	12.00		232.00	+0.13 / -0.00	225.50	+0.13 / -0.00	12.50	+0.10 / -0.00	5.50	+0.20 / -0.20
W220235100WC/U	220.00	+0.00 / -0.13	220.00	235.00	10.00		235.20	+0.13 / -0.00	228.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W220240100WC/U	220.00	+0.00 / -0.13	220.00	240.00	10.00		240.00	+0.13 / -0.00	230.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W220240120WC/U	220.00	+0.00 / -0.13	220.00	240.00	12.00		240.00	+0.13 / -0.00	233.50	+0.13 / -0.00	12.50	+0.10 / -0.00	5.50	+0.20 / -0.20
W225240090WC/U	225.00	+0.00 / -0.13	225.00	240.00	9.00		240.00	+0.13 / -0.00	235.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W225245100WC/U	225.00	+0.00 / -0.13	225.00	245.00	10.00		245.00	+0.13 / -0.00	235.00	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W230238050WC/U	230.00	+0.00 / -0.13	230.00	238.00	5.00		238.60	+0.13 / -0.00	233.00	+0.13 / -0.00	5.30	+0.10 / -0.00	1.70	+0.20 / -0.20
W230245100WC/U	230.00	+0.00 / -0.13	230.00	245.00	10.00		245.20	+0.13 / -0.00	238.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W230246073WC/U	230.00	+0.00 / -0.13	230.00	246.00	7.30		246.60	+0.13 / -0.00	240.70	+0.13 / -0.00	7.50	+0.10 / -0.00	4.50	+0.20 / -0.20
W235255100WC/U	235.00	+0.00 / -0.13	235.00	255.00	10.00		255.00	+0.13 / -0.00	245.00	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W240255100WC/U	240.00	+0.00 / -0.13	240.00	255.00	10.00		255.20	+0.13 / -0.00	248.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W240260100WC/U	240.00	+0.00 / -0.13	240.00	260.00	10.00		260.00	+0.13 / -0.00	250.00	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W245265120WC/U	245.00	+0.00 / -0.13	245.00	265.00	12.00		265.00	+0.13 / -0.00	258.50	+0.13 / -0.00	12.50	+0.10 / -0.00	5.50	+0.20 / -0.20
W250265100WC/U	250.00	+0.00 / -0.13	250.00	265.00	10.00		265.20	+0.13 / -0.00	258.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W250270100WC/U	250.00	+0.00 / -0.13	250.00	270.00	10.00		270.00	+0.13 / -0.00	260.00	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W250270120WC/U	250.00	+0.00 / -0.13	250.00	270.00	12.00		270.00	+0.13 / -0.00	263.50	+0.13 / -0.00	12.50	+0.10 / -0.00	5.50	+0.20 / -0.20
W255270090WC/U	255.00	+0.00 / -0.13	255.00	270.00	9.00		270.00	+0.13 / -0.00	265.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W257267053WC/U	257.00	+0.00 / -0.13	257.00	267.00	5.30		267.60	+0.13 / -0.00	264.00	+0.13 / -0.00	5.50	+0.10 / -0.00	2.00	+0.20 / -0.20
W260275090WC/U	260.00	+0.00 / -0.13	260.00	275.00	9.00		275.00	+0.13 / -0.00	270.00	+0.13 / -0.00	9.30	+0.10 / -0.00	4.50	+0.20 / -0.20
W260280100WC/U	260.00	+0.00 / -0.13	260.00	280.00	10.00		280.00	+0.13 / -0.00	270.50	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W265285100WC/U	265.00	+0.00 / -0.13	265.00	285.00	10.00		285.00	+0.13 / -0.00	275.00	+0.13 / -0.00	10.20	+0.10 / -0.00	4.80	+0.20 / -0.20
W270278050WC/U	270.00	+0.00 / -0.13	270.00	278.00	5.00		278.60	+0.13 / -0.00	273.00	+0.13 / -0.00	5.30	+0.10 / -0.00	1.70	+0.20 / -0.20
W270285100WC/U	270.00	+0.00 / -0.13	270.00	285.00	10.00		285.50	+0.13 / -0.00	278.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W280300100WC/U	280.00	+0.00 / -0.13	280.00	300.00	10.00		300.00	+0.13 / -0.00	290.00	+0.13 / -0.00	10.20	+0.10 / -0.00	8.00	+0.20 / -0.20
W285305120WC/U	285.00	+0.00 / -0.13	285.00	305.00	12.00		305.00	+0.13 / -0.00	298.60	+0.13 / -0.00	12.50	+0.10 / -0.00	5.50	+0.20 / -0.20
W288308100WC/U	288.00	+0.00 / -0.13	288.00	308.00	10.00		308.00	+0.13 / -0.00	301.50	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20
W290310120WC/U	290.00	+0.00 / -0.13	290.00	310.00	12.00		310.00	+0.13 / -0.00	303.50	+0.13 / -0.00	12.50	+0.10 / -0.00	5.50	+0.20 / -0.20
W295315120WC/U	295.00	+0.00 / -0.13	295.00	315.00	12.00		315.00	+0.13 / -0.00	308.50	+0.13 / -0.00	12.50	+0.10 / -0.00	5.50	+0.20 / -0.20
W300316073WC/U	300.00	+0.00 / -0.13	300.00	316.00	7.30		316.00	+0.13 / -0.00	310.70	+0.13 / -0.00	7.50	+0.10 / -0.00	4.50	+0.20 / -0.20
W300320120WC/U	300.00	+0.00 / -0.13	300.00	320.00	12.00		320.00	+0.13 / -0.00	313.50	+0.13 / -0.00	12.50	+0.10 / -0.00	4.50	+0.20 / -0.20
W305325120WC/U	305.00	+0.00 / -0.13	305.00	325.00	12.00		325.00	+0.13 / -0.00	318.50	+0.13 / -0.00	12.50	+0.10 / -0.00	4.50	+0.20 / -0.20
W320340100WC/U	320.00	+0.00 / -0.13	320.00	340.00	10.00		340.00	+0.13 / -0.00	330.00	+0.13 / -0.00	10.20	+0.10 / -0.00	7.80	+0.20 / -0.20

NOTE: MINIMUM LINE ORDER MAY APPLY

