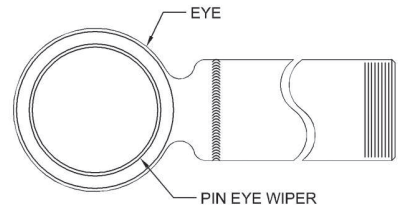
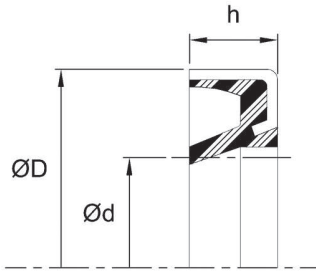
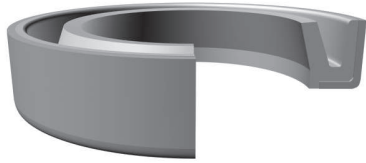


# WS - Pin Wipers

Polyurethane/Steel



Temperature: -31/212F [ -35/100C ]

Pressure: N/A

Ref.Number	Pin diameter		Nominal Seal Dimensions				Housing Dimensions							
		Tol.	d	D	h	H	D1	Tol.	D2	Tol.	h1	Tol.	H1	Tol.
W016024028WS	16.00	+0.00 / -0.04	16.00	24.00	2.80		24.00	+0.03 / -0.00			3.10	+0.02 / -0.00		
W020028026WS	20.00	+0.00 / -0.04	20.00	28.00	2.60		28.00	+0.03 / -0.00			2.90	+0.02 / -0.00		
W025035040WS	25.00	+0.00 / -0.04	25.00	35.00	4.00		35.00	+0.04 / -0.00			4.30	+0.02 / -0.00		
W030045040WS	30.00	+0.00 / -0.04	30.00	45.00	4.00		45.00	+0.04 / -0.00			4.30	+0.02 / -0.00		
W035045040WS	35.00	+0.00 / -0.04	35.00	45.00	4.00		45.00	+0.04 / -0.00			4.30	+0.02 / -0.00		
W040050031WS	40.00	+0.00 / -0.05	40.00	50.00	3.18		50.00	+0.04 / -0.00			3.48	+0.02 / -0.00		
W040050040WS	40.00	+0.00 / -0.05	40.00	50.00	4.00		50.00	+0.04 / -0.00			4.30	+0.02 / -0.00		
W040050050WS	40.00	+0.00 / -0.05	40.00	50.00	5.00		50.00	+0.04 / -0.00			5.30	+0.02 / -0.00		
W040052070WS	40.00	+0.00 / -0.05	40.00	52.00	7.00		52.00	+0.05 / -0.00			7.30	+0.02 / -0.00		
W045055031WS	45.00	+0.00 / -0.05	45.00	55.00	3.18		55.00	+0.05 / -0.00			3.48	+0.02 / -0.00		
W045055040WS	45.00	+0.00 / -0.05	45.00	55.00	4.00		55.00	+0.05 / -0.00			4.30	+0.02 / -0.00		
W045055045WS	45.00	+0.00 / -0.05	45.00	55.00	4.50		55.00	+0.05 / -0.00			4.80	+0.02 / -0.00		
W045055060WS	45.00	+0.00 / -0.05	45.00	55.00	6.00		55.00	+0.05 / -0.00			6.30	+0.02 / -0.00		
W045057070WS	45.00	+0.00 / -0.05	45.00	57.00	7.00		57.00	+0.05 / -0.00			7.30	+0.02 / -0.00		
W045060050WS	45.00	+0.00 / -0.05	45.00	60.00	5.00		60.00	+0.05 / -0.00			5.30	+0.02 / -0.00		
W050060045WS	50.00	+0.00 / -0.05	50.00	60.00	4.50		60.00	+0.05 / -0.00			4.80	+0.02 / -0.00		
W050060050WS	50.00	+0.00 / -0.05	50.00	60.00	5.00		60.00	+0.05 / -0.00			5.30	+0.02 / -0.00		
W050060060WS	50.00	+0.00 / -0.05	50.00	60.00	6.00		60.00	+0.05 / -0.00			6.30	+0.02 / -0.00		
W050062070WS	50.00	+0.00 / -0.05	50.00	62.00	7.00		62.00	+0.05 / -0.00			7.30	+0.02 / -0.00		
W050064080WS	50.00	+0.00 / -0.05	50.00	64.00	8.00		64.00	+0.05 / -0.00			8.40	+0.02 / -0.00		
W050065050WS	50.00	+0.00 / -0.05	50.00	65.00	5.00		65.00	+0.05 / -0.00			5.30	+0.02 / -0.00		
W050065060WS	50.00	+0.00 / -0.05	50.00	65.00	6.00		65.00	+0.05 / -0.00			6.30	+0.02 / -0.00		
W050065075WS	50.00	+0.00 / -0.05	50.00	65.00	7.50		65.00	+0.05 / -0.00			7.80	+0.02 / -0.00		
W050065090WS	50.00	+0.00 / -0.05	50.00	65.00	9.00		65.00	+0.05 / -0.00			9.40	+0.02 / -0.00		
W055065031WS	55.00	+0.00 / -0.05	55.00	65.00	3.18		65.00	+0.05 / -0.00			3.48	+0.02 / -0.00		
W055068060WS	55.00	+0.00 / -0.05	55.00	68.00	6.00		68.00	+0.05 / -0.00			6.30	+0.02 / -0.00		
W055069080WS	55.00	+0.00 / -0.05	55.00	69.00	8.00		69.00	+0.05 / -0.00			8.40	+0.02 / -0.00		
W055070050WS	55.00	+0.00 / -0.05	55.00	70.00	5.00		70.00	+0.05 / -0.00			5.30	+0.02 / -0.00		
W055070060WS	55.00	+0.00 / -0.05	55.00	70.00	6.00		70.00	+0.05 / -0.00			6.30	+0.02 / -0.00		
W056070075WS	56.00	+0.00 / -0.05	56.00	70.00	7.50		70.00	+0.05 / -0.00			7.80	+0.02 / -0.00		
W060073080WS	60.00	+0.00 / -0.05	60.00	73.00	8.00		73.00	+0.05 / -0.00			8.40	+0.02 / -0.00		
W060074080WS	60.00	+0.00 / -0.05	60.00	74.00	8.00		74.00	+0.05 / -0.00			8.40	+0.02 / -0.00		
W060075040WS	60.00	+0.00 / -0.05	60.00	75.00	4.00		75.00	+0.05 / -0.00			4.30	+0.02 / -0.00		
W060075050WS	60.00	+0.00 / -0.05	60.00	75.00	5.00		75.00	+0.05 / -0.00			5.30	+0.02 / -0.00		
W060075060WS	60.00	+0.00 / -0.05	60.00	75.00	6.00		75.00	+0.05 / -0.00			6.30	+0.02 / -0.00		
W060075075WS	60.00	+0.00 / -0.05	60.00	75.00	7.50		75.00	+0.05 / -0.00			7.80	+0.02 / -0.00		

NOTE: MINIMUM LINE ORDER MAY APPLY



## WS SERIES - AU/STEEL

Ref.Number	Pin diameter		Nominal Seal Dimensions				Housing Dimensions								
	Tol.		d	D	h	H	D1	Tol.		D2	Tol.		H1	Tol.	
W060075080WS	60.00	+0.00 / -0.05	60.00	75.00	8.00		75.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W065079080WS	65.00	+0.00 / -0.06	65.00	79.00	8.00		79.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W065080050WS	65.00	+0.00 / -0.06	65.00	80.00	5.00		80.00	+0.05 / -0.00			5.30	+0.02 / -0.00			
W065080080WS	65.00	+0.00 / -0.06	65.00	80.00	8.00		80.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W070080040WS	70.00	+0.00 / -0.06	70.00	80.00	4.00		80.00	+0.05 / -0.00			4.30	+0.02 / -0.00			
W070084080WS	70.00	+0.00 / -0.06	70.00	84.00	8.00		84.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W070085050WS	70.00	+0.00 / -0.06	70.00	85.00	5.00		85.00	+0.05 / -0.00			5.30	+0.02 / -0.00			
W070085070WS	70.00	+0.00 / -0.06	70.00	85.00	7.00		85.00	+0.05 / -0.00			7.30	+0.02 / -0.00			
W070085075WS	70.00	+0.00 / -0.06	70.00	85.00	7.50		85.00	+0.05 / -0.00			7.80	+0.02 / -0.00			
W070085080WS	70.00	+0.00 / -0.06	70.00	85.00	8.00		85.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W071086050WS	71.00	+0.00 / -0.06	71.00	86.00	5.00		86.00	+0.05 / -0.00			5.30	+0.02 / -0.00			
W071086060WS	71.00	+0.00 / -0.06	71.00	86.00	6.00		86.00	+0.05 / -0.00			6.30	+0.02 / -0.00			
W075089080WS	75.00	+0.00 / -0.06	75.00	89.00	8.00		89.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W075090060WS	75.00	+0.00 / -0.06	75.00	90.00	6.00		90.00	+0.05 / -0.00			6.30	+0.02 / -0.00			
W075090080WS	75.00	+0.00 / -0.06	75.00	90.00	8.00		90.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W080090045WS	80.00	+0.00 / -0.09	80.00	90.00	4.50		90.00	+0.05 / -0.00			4.80	+0.02 / -0.00			
W080094080WS	80.00	+0.00 / -0.09	80.00	94.00	8.00		95.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W080095050WS	80.00	+0.00 / -0.09	80.00	95.00	5.00		95.00	+0.05 / -0.00			5.30	+0.02 / -0.00			
W080095060WS	80.00	+0.00 / -0.09	80.00	95.00	6.00		95.00	+0.05 / -0.00			6.30	+0.02 / -0.00			
W080095080WS	80.00	+0.00 / -0.09	80.00	95.00	8.00		95.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W085095050WS	85.00	+0.00 / -0.09	85.00	95.00	5.00		95.00	+0.05 / -0.00			5.30	+0.02 / -0.00			
W085099080WS	85.00	+0.00 / -0.09	85.00	99.00	8.00		99.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W085100080WS	85.00	+0.00 / -0.09	85.00	100.00	8.00		100.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W090100070WS	90.00	+0.00 / -0.09	90.00	100.00	7.00		100.00	+0.05 / -0.00			7.30	+0.02 / -0.00			
W090104080WS	90.00	+0.00 / -0.09	90.00	104.00	8.00		104.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W090105060WS	90.00	+0.00 / -0.09	90.00	105.00	6.00		105.00	+0.05 / -0.00			6.30	+0.02 / -0.00			
W090105080WS	90.00	+0.00 / -0.09	90.00	105.00	8.00		105.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W090110100WS	90.00	+0.00 / -0.09	90.00	110.00	10.00		110.00	+0.05 / -0.00			10.40	+0.02 / -0.00			
W095109080WS	95.00	+0.00 / -0.09	95.00	109.00	8.00		109.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W095110080WS	95.00	+0.00 / -0.09	95.00	110.00	8.00		110.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W100114080WS	100.00	+0.00 / -0.09	100.00	114.00	8.00		114.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W100115060WS	100.00	+0.00 / -0.09	100.00	115.00	6.00		115.00	+0.05 / -0.00			6.30	+0.02 / -0.00			
W100115070WS	100.00	+0.00 / -0.09	100.00	115.00	7.00		115.00	+0.05 / -0.00			7.30	+0.02 / -0.00			
W100120040WS	100.00	+0.00 / -0.09	100.00	120.00	4.00		120.00	+0.05 / -0.00			4.30	+0.02 / -0.00			
W100120100WS	100.00	+0.00 / -0.09	100.00	120.00	10.00		120.00	+0.05 / -0.00			10.40	+0.02 / -0.00			
W100125040WS	100.00	+0.00 / -0.09	100.00	125.00	4.00		125.00	+0.06 / -0.00			4.30	+0.02 / -0.00			
W105120070WS	105.00	+0.00 / -0.13	105.00	120.00	7.00		120.00	+0.05 / -0.00			7.30	+0.02 / -0.00			
W105120080WS	105.00	+0.00 / -0.13	105.00	120.00	8.00		120.00	+0.05 / -0.00			8.40	+0.02 / -0.00			
W105121090WS	105.00	+0.00 / -0.13	105.00	121.00	9.00		121.00	+0.06 / -0.00			9.40	+0.02 / -0.00			
W110125040WS	110.00	+0.00 / -0.13	110.00	125.00	4.00		125.00	+0.06 / -0.00			4.30	+0.02 / -0.00			
W110125080WS	110.00	+0.00 / -0.13	110.00	125.00	8.00		125.00	+0.06 / -0.00			8.40	+0.02 / -0.00			
W110125090WS	110.00	+0.00 / -0.13	110.00	125.00	9.00		125.00	+0.06 / -0.00			9.40	+0.02 / -0.00			
W110126090WS	110.00	+0.00 / -0.13	110.00	126.00	9.00		126.00	+0.06 / -0.00			9.40	+0.02 / -0.00			
W110130100WS	110.00	+0.00 / -0.13	110.00	130.00	10.00		130.00	+0.06 / -0.00			10.40	+0.02 / -0.00			
W115131090WS	115.00	+0.00 / -0.13	115.00	131.00	9.00		131.00	+0.06 / -0.00			9.40	+0.02 / -0.00			
W120135080WS	120.00	+0.00 / -0.13	120.00	135.00	8.00		135.00	+0.06 / -0.00			8.40	+0.02 / -0.00			
W120136090WS	120.00	+0.00 / -0.13	120.00	136.00	9.00		136.00	+0.06 / -0.00			9.40	+0.02 / -0.00			

NOTE: MINIMUM LINE ORDER MAY APPLY



**WS SERIES - AU/STEEL**

Ref.Number	Pin diameter		Nominal Seal Dimensions				Housing Dimensions							
		Tol.	d	D	h	H	D1	Tol.	D2	Tol.	h1	Tol.	H1	Tol.
W130146090WS	130.00	+0.00 / -0.13	130.00	146.00	9.00		146.00	+0.06 / -0.00			9.40	+0.02 / -0.00		
W140160100WS	140.00	+0.00 / -0.13	140.00	160.00	10.00		160.00	+0.06 / -0.00			10.40	+0.02 / -0.00		
W150170100WS	150.00	+0.00 / -0.13	150.00	170.00	10.00		170.00	+0.06 / -0.00			10.40	+0.02 / -0.00		
W180205120WS	180.00	+0.00 / -0.13	180.00	205.00	12.00		205.00	+0.07 / -0.00			12.40	+0.02 / -0.00		
W180210130WS	180.00	+0.00 / -0.13	180.00	210.00	13.00		210.00	+0.07 / -0.00			13.40	+0.02 / -0.00		
W190202080WS	190.00	+0.00 / -0.13	190.00	202.00	8.00		202.00	+0.07 / -0.00			8.40	+0.02 / -0.00		
W190210100WS	190.00	+0.00 / -0.13	190.00	210.00	10.00		210.00	+0.07 / -0.00			10.40	+0.02 / -0.00		
W200225120WS	200.00	+0.00 / -0.13	200.00	225.00	12.00		225.00	+0.07 / -0.00			12.40	+0.02 / -0.00		
W280310160WS	280.00	+0.00 / -0.13	280.00	310.00	16.00		310.00	+0.08 / -0.00			16.40	+0.02 / -0.00		

NOTE: MINIMUM LINE ORDER MAY APPLY

**METRIC SIZE  
ROD WIPERS**

