







SEAL SELECTION GUIDE BY PERFORMANCE

Application Information	SEAL TYPE					
						
	Helicoflex®	Delta®	O-Flex™	C-Flex™	E-Flex™ U-Flex™*	Machined Seal*
Ultra High Vacuum	●	▲▲	■	■	■	▲
Low Pressure	▲▲	●	▲	▲	▲	▲
High Pressure	▲▲	■	▲	▲▲	●	▲
Cryogenic Temperature	▲▲	▲	●	●	●	■
High Temperature	▲▲	▲	▲	▲	▲	■
Spring Back	●	●	●	▲	▲▲	■
Shaped Seals	▲	▲	▲	●	■	■
Axial Sealing	▲	■	●	▲	■	■
QDS Compatible	▲	▲	■	■	■	■
Seating Load	High	Moderate	High Moderate	Moderate Low	Low	High Moderate
Leak Rate Approximation	Helium	Ultra-Helium	Helium Bubble	Helium Bubble	Low Bubble	Helium

* See Custom Seals Section

Application Legend	
Recommended - Excellent	▲▲
Recommended - Good	▲
Optional - Special Design	●
Not Recommended	■

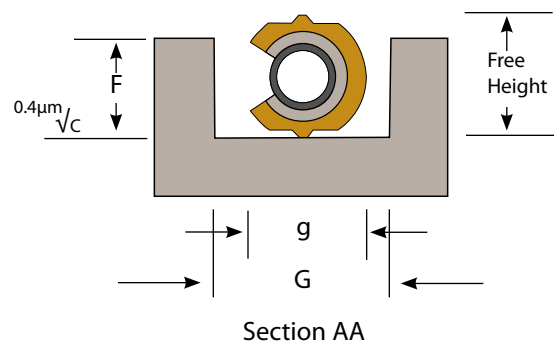
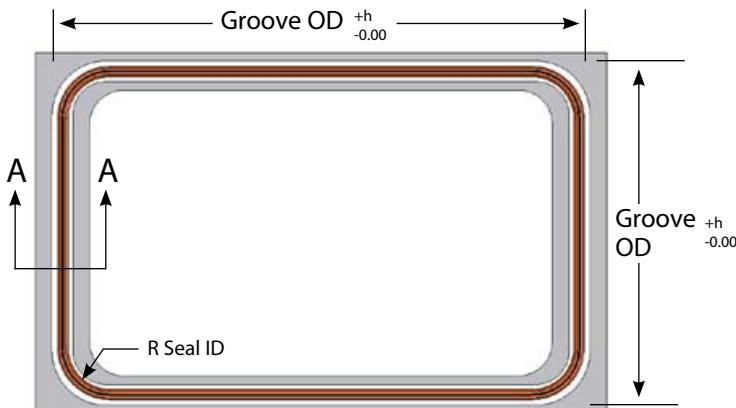
Leak Legend	Approximate Leak Rates per meter of circumference	Actual leak rate in service will depend on the following:
Ultra-Helium	≤ 1 x 10 ⁻¹¹ std.cc/sec He	Seal Load: Wall Thickness or Spring Load Surface Finish: Seal and Cavity Surface Treatment: Coating/Plating/Jacket Material
Helium	≤ 1 x 10 ⁻⁹ std.cc/sec He	
Bubble	≤ 1 x 10 ⁻⁴ std.cc/sec He	
Low Bubble	≤ 25 cc/sec @ 0.345 MPa Nitrogen per 25.4 mm of diameter	

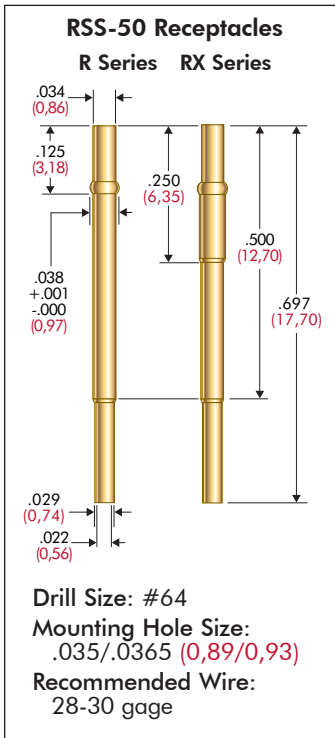
Shaped Seal: Delta[®] Groove Dimensions

Seal								Groove			
Jacket Material	Free Height	Seal Section g	Seal Type	Installation Compression e_2	Seating Load N/mm Y_2	Seal Tolerance t	Bend Radius ID R (Min)	Groove Tolerance h	Groove Depth F	Groove Width G (Min)	Min. Flange Hardness (Vickers)
Aluminum	1.90	2.00	HN100	Contact Applications Engineering				Contact Applications Engineering			
	2.60	2.70	HN200	0.70	210	Fit Template	19.05	0.25	1.90 ± 0.05	4.32	65
	3.30	3.40	HN200	0.80	184	Fit Template	25.40	0.25	2.50 ± 0.05	5.08	65
	4.00	4.10	HN200	0.90	184	Fit Template	28.58	0.25	3.10 ± 0.05	5.84	65
	4.80	4.90	HN200	0.90	184	Fit Template	34.93	0.25	3.90 ± 0.08	6.73	65
	5.60	5.80	HN200	1.00	205	Fit Template	38.10	0.51	4.60 ± 0.08	7.62	65
	6.70	6.90	HN200	1.10	210	Fit Template	44.45	0.51	5.60 ± 0.08	8.64	65
Silver	1.70	1.80	HN100	Contact Applications Engineering				Contact Applications Engineering			
	2.40	2.50	HN200	0.60	184	Fit Template	15.88	0.25	1.80 ± 0.05	4.06	120
	3.10	3.20	HN200	0.60	201	Fit Template	22.23	0.25	2.50 ± 0.05	4.70	120
	3.90	4.00	HN200	0.70	193	Fit Template	25.40	0.25	3.20 ± 0.05	5.59	120
	4.70	4.80	HN200	0.80	193	Fit Template	31.75	0.25	3.90 ± 0.08	6.48	120
Copper	1.65	1.75	HN100	Contact Applications Engineering				Contact Applications Engineering			
	2.34	2.44	HN200	0.43	193	Fit Template	15.88	0.25	1.91 ± 0.03	3.81	130
	3.05	3.15	HN200	0.53	236	Fit Template	22.23	0.25	2.49 ± 0.05	4.57	130
	3.94	4.04	HN200	0.64	223	Fit Template	25.40	0.25	3.30 ± 0.05	5.59	130
	4.55	4.65	HN200	0.64	223	Fit Template	28.58	0.25	3.91 ± 0.05	6.22	130
Nickel (Annealed)	1.65	1.75	HN100	Contact Applications Engineering				Contact Applications Engineering			
	2.34	2.44	HN200	0.43	193	Fit Template	15.88	0.25	1.91 ± 0.03	3.81	220
	3.05	3.15	HN200	0.53	236	Fit Template	22.23	0.25	2.49 ± 0.05	4.57	220
	3.94	4.04	HN200	0.64	223	Fit Template	25.40	0.25	3.30 ± 0.05	5.59	220
	4.55	4.65	HN200	0.64	223	Fit Template	28.58	0.25	3.91 ± 0.05	6.22	220
Stainless Steel	Contact Applications Engineering										

NOTES:

1. Seating load is in Newtons per millimeter of circumference.
2. Seating Load (Y_2) is an approximation and may vary based on groove clearance, seal diameter and tolerance. Load values may be slightly higher in corner radii.
3. Seal type HN100 is available as an option only. Type HN200 is preferred due to its protective inner lining and can be expected to produce better results.
4. Seal Tolerance: Seal is manufactured to fit customer supplied/purchased groove template.
5. All machining and polishing marks must follow seal circumference.





SS-50 PROBE



PROBE SPECIFICATIONS

Minimum Centers: .050 (1,27)
 Current Rating: 3 amps continuous
 Spring Force: 2.9, 3.3 or 5.1 oz. @ .050 (1,27) travel
 Typical Resistance : <35 mΩ
 Maximum Travel: .050 (1,27)
 Working Travel: .050 (1,27)

Rated Force oz (gms)	Preload oz (gms)	Material
2.9 (82)	1.1 (31)	BeCu
3.3 (94)	1.7 (48)	SS
5.1 (145)	1.5 (42)	MW

MATERIALS

Barrel: Nickel/silver, gold plated
 Spring: Beryllium copper, stainless steel or music wire, gold plated
 Plunger: Full-hard beryllium copper, gold plated over nickel or optional Duralloy™
 Receptacle: Nickel/silver, gold plated, gold plated post
 Plug-In Terminal: Beryllium copper, gold plated

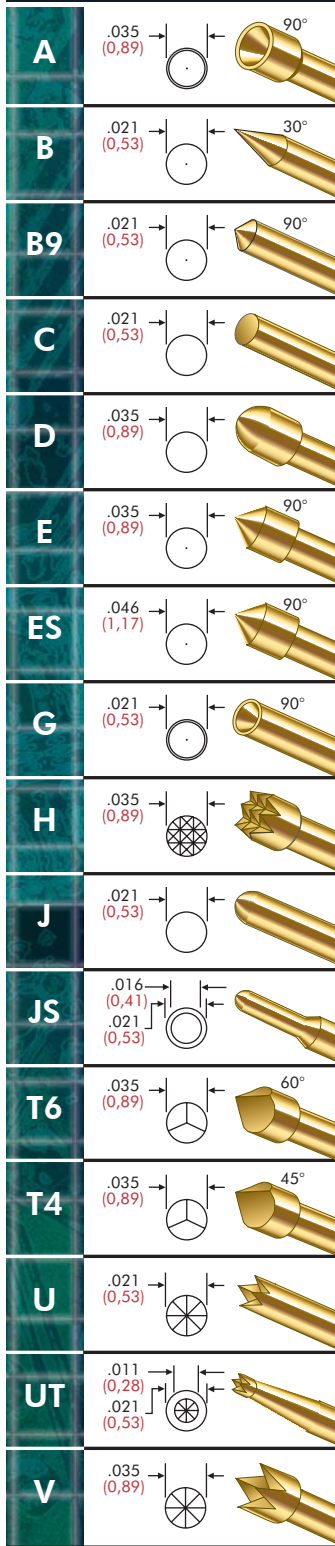
Ordered version: **SS-50-J-3.3-G RSS-50-WT**

RECEPTACLE OPTIONS

Part Number	Style	Receptacle Length	Probe/Receptacle Combined Length	Comments
RSS-50-CR	Crimp	0.697 (17,70)	0.807 (20,50)	—
RSS-50-SC	Solder Cup	0.697 (17,70)	0.807 (20,50)	—
RSS-50-WW-016	Wire Wrap	0.947 (24,05)	1.057 (26,85)	.250 post length - .016 sq.
RSS-50-WW-025	Wire Wrap	0.997 (25,32)	1.107 (28,12)	.300 post length - .025 sq.
RSS-50-PW	Preattached Wire*	0.697 (17,70)	.807 (20,50)	30 gage - non vacuum sealed
RSS-50-DS	Duraseal®*	0.697 (17,70)	.807 (20,50)	30 or 28 gage - vacuum sealed
RSS-50-WT	Plug-In Receptacle	0.697 (17,70)	.807 (20,50)	For use with WT-EZ terminal
WT-EZ	Plug-In Terminal*	—	—	Plugs into R-SS-50-WT receptacle

* Unless otherwise specified, wire length 36", strip length 1", 30 gage Kynar

BeCu PLUNGER TIPS



HOW TO ORDER: SPRING CONTACT PROBE RECEPTACLE

SS SERIES	50 SIZE	A TIP STYLE	2.9 SPRING FORCE	G PLATING OPTIONS	RSS SERIES	50 SIZE	CR TERMINATION
SERIES: SS: Standard SSX: Improved Pointing Accuracy		PLATING OPTIONS: G: Gold Plated Plunger D: Duralloy™ Plated Plunger		SERIES: RSS: High Performance RXSS: Improved Pointing Accuracy		TERMINATIONS: CR: Crimp SC: Solder Cup WW-016: Wire Wrap .016 sq WW-025: Wire Wrap .025 sq PW: Preattached Wire* DS: Duraseal* WT: Plug-In Receptacle** WT-EZ: Plug-In Terminal*	
SPRING FORCE: 2.9 oz. @ .050 (1,27) travel 3.3 oz. @ .050 (1,27) travel 5.1 oz. @ .050 (1,27) travel		CRIMPING PLIERS: CPSS50 INSERTION TOOL: RTSS50 WIRE PLUG TOOL: RTWT		* Unless otherwise specified, wire length 36", strip length 1", 30 gage Kynar ** For use with WT-EZ plug-in terminal			

View updates of this information at www.idinet.com

Specifications subject to change without notice. Dimensions in inches (millimeters)

Original SCHNORR® Tellerfedern aus Standardwerkstoffen							Ø 200 - 250 mm						
Artikel- nummer/ Bestell- nummer	Bestellmaße						Gewicht je 1000 Stück [kg]	Federweg s und Federkraft F					
	D _e [mm]	D _i [mm]	t [mm]	t' [mm]	l ₀ [mm]	h ₀ [mm]		bei s = 0,25 h ₀		bei s = 0,50 h ₀		bei s = 0,75 h ₀	
							s [mm]	F [N]	s [mm]	F [N]	s [mm]	F [N]	
023 300	200,00	112,00	16,00	14,80	18,80	2,80	2493,000	0,700	105268	1,400	206697	2,100	305100
023 350 C	225,00	112,00	6,50	6,20	13,60	7,10	1450,000	1,775	23583	3,550	37417	5,325	44580
023 400 B	225,00	112,00	8,00	7,50	14,50	6,50	1754,000	1,625	32870	3,250	55412	4,875	70749
023 500 A	225,00	112,00	12,00	11,25	17,00	5,00	2631,000	1,250	64497	2,500	120738	3,750	171016
023 600	250,00	102,00	10,00	9,60	18,00	8,00	3075,000	2,000	56867	4,000	97282	6,000	126387
023 700	250,00	102,00	12,00	11,50	19,00	7,00	3683,000	1,750	73563	3,500	133131	5,250	182962
023 750 C	250,00	127,00	7,00	6,70	14,80	7,80	1909,000	1,950	26895	3,900	42527	5,850	50466
023 800 B	250,00	127,00	10,00	9,40	17,00	7,00	2678,000	1,750	51871	3,500	90206	5,250	119053
023 900	250,00	127,00	12,00	11,25	19,30	7,30	3205,000	1,825	87633	3,650	156021	5,475	210806
024 000 A	250,00	127,00	14,00	13,10	19,60	5,60	3732,000	1,400	93239	2,800	175145	4,200	248828
024 100	250,00	127,00	16,00	15,00	21,80	5,80	4273,000	1,450	140941	2,900	267296	4,350	383017

Korrosionsbeständige SCHNORR® Tellerfedern, Werkstoff: 1.4310 (X10 CrNi 18-8)							Ø 6 - 15 mm						
Artikel- nummer/ Bestell- nummer	Bestellmaße						Gewicht je 1000 Stück [kg]	Federweg s und Federkraft F					
	D _e [mm]	D _i [mm]	t [mm]	l ₀ [mm]	h ₀ [mm]	bei s = 0,25 h ₀		bei s = 0,50 h ₀		bei s = 0,75 h ₀			
							s [mm]	F [N]	s [mm]	F [N]	s [mm]	F [N]	
024 650	6,00	3,20	0,30	0,45	0,15	0,047	0,038	41	0,075	77	0,113	110	
025 250	8,00	3,20	0,20	0,40	0,20	0,066	0,050	11	0,100	19	0,150	24	
025 400	8,00	3,20	0,30	0,55	0,25	0,098	0,063	42	0,125	73	0,188	96	
025 700	8,00	3,20	0,40	0,55	0,15	0,131	0,038	45	0,075	87	0,113	126	
026 300	8,00	3,20	0,50	0,70	0,20	0,166	0,050	119	0,100	227	0,150	330	
026 700	8,00	4,20	0,20	0,45	0,25	0,057	0,063	20	0,125	31	0,188	36	
027 100	8,00	4,20	0,30	0,50	0,20	0,085	0,050	34	0,100	61	0,150	84	
027 400	8,00	4,20	0,40	0,60	0,20	0,113	0,050	72	0,100	136	0,150	193	
028 910	10,00	3,20	0,30	0,65	0,35	0,165	0,088	47	0,175	75	0,263	91	
029 101	10,00	3,20	0,40	0,70	0,30	0,220	0,075	69	0,150	123	0,225	165	
029 301	10,00	3,20	0,50	0,70	0,20	0,274	0,050	73	0,100	140	0,150	203	
029 602	10,00	4,20	0,40	0,70	0,30	0,202	0,075	73	0,150	130	0,225	175	
029 701	10,00	4,20	0,50	0,70	0,20	0,252	0,050	77	0,100	148	0,150	214	
030 290	10,00	5,20	0,25	0,55	0,30	0,112	0,075	28	0,150	45	0,225	53	
030 800	10,00	5,20	0,40	0,65	0,25	0,179	0,063	62	0,125	113	0,188	157	
031 000	10,00	5,20	0,50	0,70	0,20	0,223	0,050	85	0,100	163	0,150	237	
032 040	12,00	4,20	0,40	0,80	0,40	0,309	0,100	79	0,200	130	0,300	165	
032 500	12,00	4,20	0,50	0,80	0,30	0,386	0,075	86	0,150	158	0,225	220	
032 704	12,00	4,20	0,60	0,85	0,25	0,463	0,063	111	0,125	213	0,188	308	
033 400	12,00	5,20	0,50	0,80	0,30	0,357	0,075	91	0,150	166	0,225	232	
033 500	12,00	5,20	0,60	0,85	0,25	0,429	0,063	118	0,125	225	0,188	325	
034 200	12,00	6,20	0,50	0,85	0,35	0,323	0,088	123	0,175	221	0,263	301	
034 550	12,00	6,20	0,60	0,85	0,25	0,387	0,063	128	0,125	245	0,188	355	
035 040	12,50	5,20	0,50	0,85	0,35	0,395	0,088	103	0,175	184	0,263	251	
035 103	12,50	6,20	0,35	0,80	0,45	0,253	0,113	77	0,225	120	0,338	140	
035 400	12,50	6,20	0,50	0,85	0,35	0,361	0,088	111	0,175	198	0,263	271	
035 601	12,50	6,20	0,70	0,95	0,25	0,504	0,063	178	0,125	344	0,188	503	
038 353	14,00	7,20	0,35	0,80	0,45	0,310	0,113	63	0,225	98	0,338	114	
038 600	14,00	7,20	0,50	0,90	0,40	0,442	0,100	111	0,200	194	0,300	258	
039 040	14,00	7,20	0,80	1,05	0,25	0,706	0,063	213	0,125	414	0,188	609	
039 500	15,00	5,20	0,40	0,95	0,55	0,486	0,138	93	0,275	142	0,413	162	
039 800	15,00	5,20	0,50	1,00	0,50	0,607	0,125	123	0,250	204	0,375	257	
039 971	15,00	5,20	0,60	1,05	0,45	0,728	0,113	158	0,225	279	0,338	376	