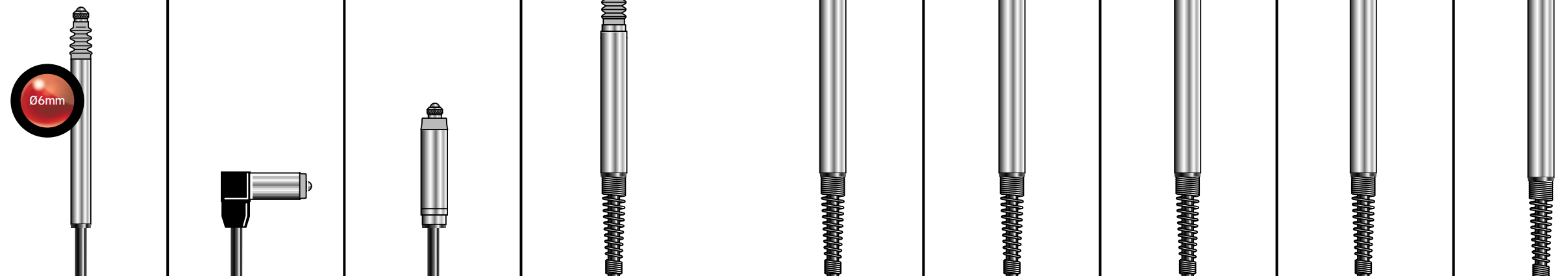
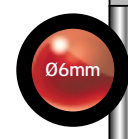
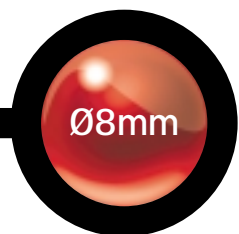




20 Specification Spring push



Product type	Analogue			Digital	Analogue			Digital	Analogue			Digital	Analogue			Digital	Analogue			Digital	Analogue			Digital														
	LVDT	H/B			LVDT	H/B			LVDT	H/B			LVDT	H/B			LVDT	H/B			LVDT	H/B			LVDT	H/B												
Axial cable outlet: Standard Spring	A6G/1/S	A6G/1/SH		D6P/2/S	AX/0.25/S	AX/0.25/SH		DP/0.5/S	AX/0.5/S	AX/0.5/SH		DP/1/S	AX/1/S	AX/1/SH		DP/2/S	AX5/1/S	AX5/1/SH		DP10/2/S	AX/1.5/S	AX/1.5/SH		AX/2.5/S	AX/2.5/SH		DP/5/S	AX/5/S	AX/5/SH		DP/10/S	AX/10/S	AX/10/SH		DP/20/S	AX/20/S	AX/20/SH	
Feather Touch	-	-	-	-	-	-	-	-	-	-	-	-	AT/1/S	AT/1/SH		DT/2/S	-	-	-	-	AT/1.5/S	AT/1.5/SH		AT/2.5/S	AT/2.5/SH		DT/5/S	AT/5/S	AT/5/SH		DT/10/S	AT/10/S	AT/10/SH		DT/20/S	AT/20/S	AT/20/SH	
Vacuum	-	-	-	-	-	-	-	-	-	-	-	-	AX/1/V	AX/1/VH		-	-	-	-	-	AX/1.5/V	AX/1.5/VH		AX/2.5/V	AX/2.5/VH		-	AX/5/V	AX/5/VH		AX/10/V	AX/10/VH		AX/20/V	AX/20/VH		-	
Radial cable outlet: Standard Spring	-	-	-	-	-	-	-	-	-	-	-	-	AXR/1/S	AXR/1/SH		-	-	-	-	-	ATR/1.5/S	ATR/1.5/SH		ATR/2.5/S	ATR/2.5/SH		DTR/5/S	ATR/5/S	ATR/5/SH		DTR/10/S	ATR/10/S	ATR/10/SH		DTR/20/S	ATR/20/S	ATR/20/SH	
Feather Touch	-	-	-	-	-	-	-	-	-	-	-	-	ATR/1/S	ATR/1/SH		DTR/2/S	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Measurement																																						
Measurement Range (mm)	±1			2	±0.25			0.5	±0.5			1	±1			2	±1.5			-	±2.5			5	±5			10	±10			20						
Accuracy¹ (% of reading or µm)	0.5, 1µm			0.1	0.5, 0.5µm			0.1	0.5, 1µm			0.1	0.5, 1µm			0.1	0.5, 1.5µm			-	0.5, 2.5µm			0.2	0.5, 5µm			0.2	0.7, 10µm			0.2						
Resolution	Analogue: Dependent on electronics												Digital: User selectable to <0.1µm																									
Repeatability (µm)	0.15			0.1	0.15			0.15	0.15			0.15	0.15			-	0.15			-	0.15			0.15	0.15			0.15										
Pre-travel (mm)	0.15			0.03	0.15			0.15	0.15			0.15	0.15			-	0.15			-	0.15			0.15	0.15			0.15										
Post-travel (mm)	0.35			0.05	0.35			0.35	0.35			0.35	0.85			-	0.85			-	0.85			0.85	0.85			0.85										
Pre-travel Adjustment range (mm)	None			None	0.5			None	1			None	None			-	1.5			-	1.5			None	1.5			None	None			None						
Tip Force: Standard/Vacuum ±20% (N)	0.7 @ mid position			0.7 @ mid position	0.7 @ mid position			0.7 @ mid position	0.7 @ mid position			0.7 @ mid position	0.7 @ mid position			-	0.7 @ mid position			-	0.7 @ mid position			0.7 @ mid position	0.7 @ mid position			0.7 @ mid position										
Tip Force: Feather Touch ±20% (N)	0.3 @ mid position			0.3 @ mid position	0.3 @ mid position			0.3 @ mid position	0.3 @ mid position			0.3 @ mid position	0.3 @ mid position			-	0.3 @ mid position			-	0.3 @ mid position			0.3 @ mid position	0.3 @ mid position			0.3 @ mid position										
Temperature Coefficient %FS/°C	0.02			0.03	0.03			0.03	0.01			0.01	0.01			-	0.01			-	0.01			0.01	0.01			0.01										
Mechanical																																						
Body Diameter (mm)	6h6			8h6	8h6			8h6	8h6			8h6	8h6			-	8h6			-	8h6			8h6	8h6			8h6										
Electrical Interface (Plugged)²																																						
Sensitivity (mV/V/mm ±5%)	200	73.5	-	200	73.5	-	200	73.5	-	200	73.5	-	200	73.5	-	200	73.5	-	133	49	-	80	29.4	-	40	14.7	-	20	7.35	-								
Energising Current (mA/V±5%)	3	1.2	-	2.2	1.2	-	2.2	1.2	-	1.8	1	-	1.8	1	-	2	1	-	2	1	-	2	1	-	2	1.2	-	1	1.2	-								
Electrical Interface (Unplugged)²																																						
Sensitivity (mV/V/mm ±5%)	269	88	-	262	82	-	262	82	-	210	83	-	210	83	-	150	82	-	150	82	-	150	82	-	105	51	-	33	33	-								

Materials
 Case: Stainless Steel
 Tip: Nylon or Tungsten Carbide*
 Gaiter³: Viton®
 Cable⁴: PUR

*Other options available

Environmental (Probe Head Only)
 Storage Temp (°C): -40 to +100
 Operating Temp⁶ with gaiter (°C): +5 to +80
 Operating Temp⁶ without gaiter (°C): -10 to +80
 IP rating: IP65

Operating Pressure Range
 Vacuum operation: 0 to 0.27 Bar absolute

Digital Probe Interface Electronics⁵
 Reading Rate: Up to 3906 readings/second
 Bandwidth: Up to 460Hz dependent on noise performance required
 Output: Serial communication-RS485 signal level (Solartron Orbit Protocol)
 Power: 5 ±0.25 VDC @ 0.06A (includes power for probe)
 Storage Temp (°C): -20 to +70
 Operating Temp (°C): 0 to +60
 IP Rating: IP43

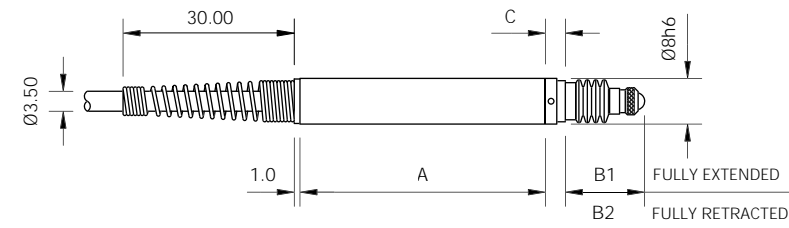
1 Probe Accuracy
 The accuracy of the LVDT and Half Bridge probes is quoted as % of reading or µm, which ever is greater.
 The accuracy of the Digital Probe range is quoted as [(resolution) + (accuracy %) x D] where D is the distance from the setting master.
 (Please refer to the Glossary for definitions)

2 LVDT and Half Bridge Probe Performance
 Accuracy, sensitivity and energising current are valid for the following calibration conditions: LVDT probes calibrated at 3 V, 5 kHz frequency into a 10 kΩ load or 100 kΩ for the unplugged versions. Half Bridge probes calibrated at 3 V, 10 kHz frequency into a 2 kΩ load or 1 kΩ for the unplugged versions. The probes will operate with energising voltages in the range 1 V to 10 V and with frequencies in the range 2 kHz to 20 kHz but the performance is not specified.

3 Viton is a trademark of DuPont Dow Elastomers.
4 Cables
 All probes are supplied with 2 m of PUR cable as standard. Other lengths and options such as nylon braided, metal braided and armoured are available on request.
5 Digital Probe Termination
 Digital Probes are terminated with Solartron's Probe Interface Electronics (PIE) module. Please refer to the Orbit Network for details on this module and methods of integration for Digital Probes.
6 Below 0°C environment must be dry

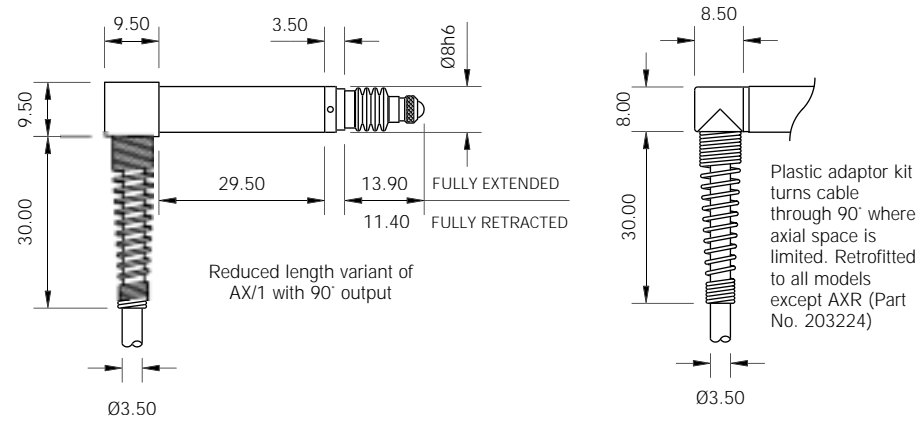


Standard Spring Push (AX/S and DP/S)

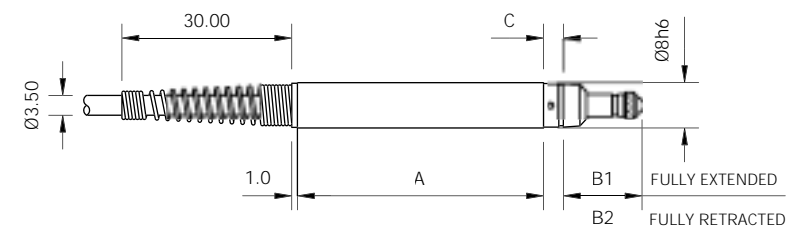


	AX/1/S	DP/2/S	AX/1.5/S	AX5/1/S	AX/2.5/S	DP/5/S	AX/5/S	DP/10/S	AX/10/S
				DP/10/2/S					DP/20/S
A	43.00	46.00	58.00	75.00	63.00	65.00	87.00	89.00	127.00
C	3.5	2.00	4.00	4.00	4.00	2.00	4.00	2.00	3.00
B1	13.9	13.9	15.40	25.40	17.40	17.40	25.40	25.40	44.90
B2	11.4	10.9	11.40	14.40	11.40	11.40	14.40	14.40	23.90

Right Angle Spring Push (AXR and DPR)

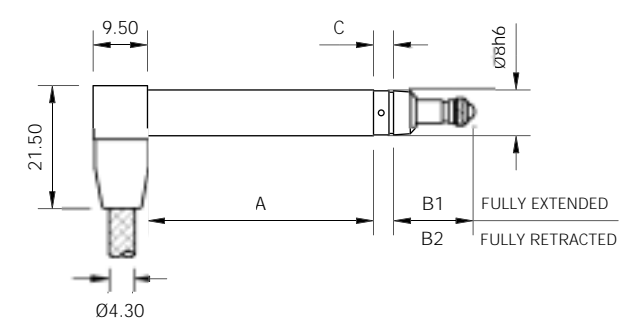


Feather Touch Spring Push (AT/S and DT/S)



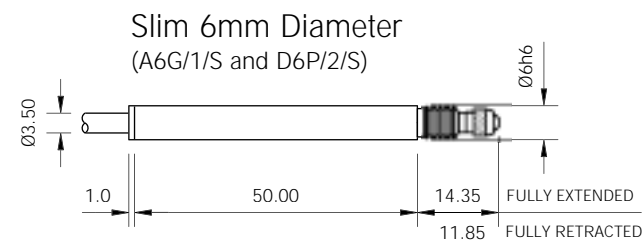
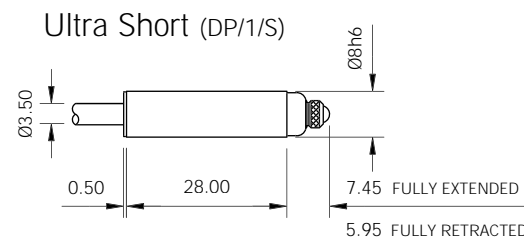
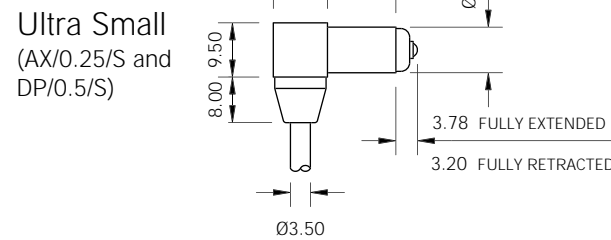
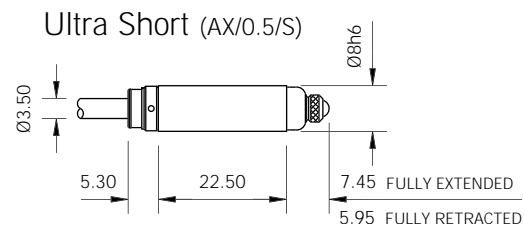
	AT/1/S	DT/2/S	AT/1.5/S	AT/2.5/S	DT/5/S	AT/5/S	DT/10/S	AT/10/S
								DT/20/S
A	43.00	46.00	58.00	63.00	65.00	87.00	89.00	127.00
C	3.50	2.00	4.00	4.00	2.00	4.00	2.00	3.00
B1	13.90	13.90	15.40	17.40	17.40	25.40	25.40	33.90
B2	11.40	10.90	11.40	11.40	11.40	14.40	14.40	12.90

Right Angle Feather Touch Spring Push with braided cable (ATR/S and DTR/S)

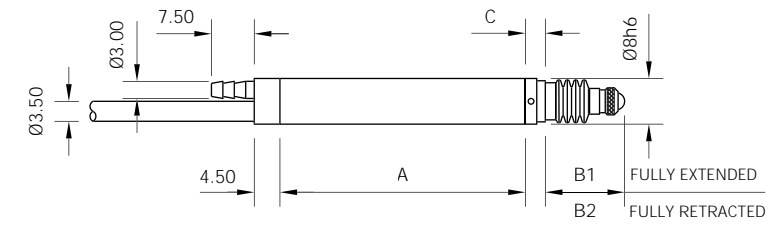


	ATR/1/S	DTR/2/S	ATR/1.5/S	ATR/2.5/S	DTR/5/S	ATR/5/S	DTR/10/S	ATR/10/S
								DTR/20/S
A	29.50	33.50	44.50	49.50	52.50	73.50	76.50	113.50
C	3.50	2.00	4.00	4.00	2.00	4.00	2.00	3.00
B1	13.90	13.90	15.40	17.40	17.40	25.40	25.40	33.90
B2	11.40	10.90	11.40	11.40	11.40	14.40	14.40	12.90

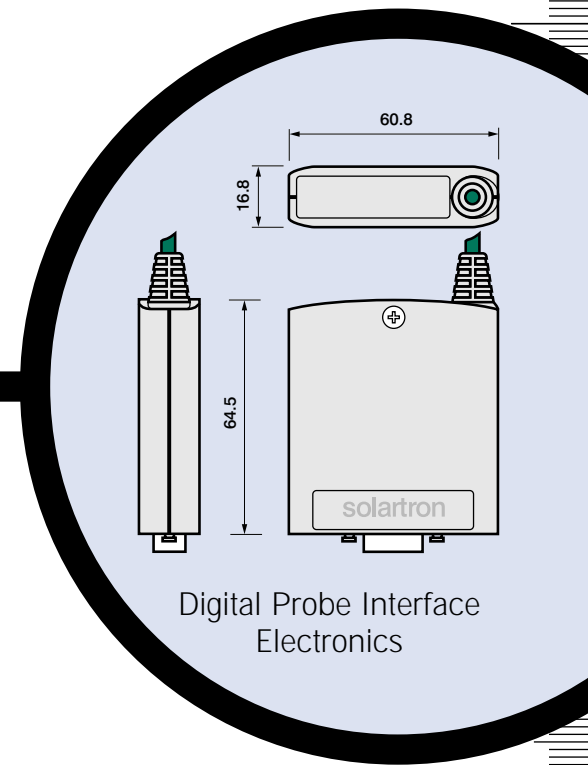
Special Spring Push Probes



Vacuum Retract (AX/V and DP/V)



	AX/1/V	DP/2/V	AX/5/1/V	AX/1.5/V	AX/2.5/V	DP/5/V	AX/5/V	DP/10/V	AX/10/V
									DP/20/V
A	43.00	46.00	84.00	58.00	63.00	65.00	87.00	96.00	127.00
C	3.50	2.00	4.00	4.00	4.00	2.00	4.00	2.00	3.00
B1	13.90	13.90	25.40	15.40	17.40	17.40	25.40	25.40	44.90
B2	11.40	11.40	14.40	11.40	11.40	11.40	14.40	14.40	23.90



Digital Probe Interface Electronics