

displacement transducers

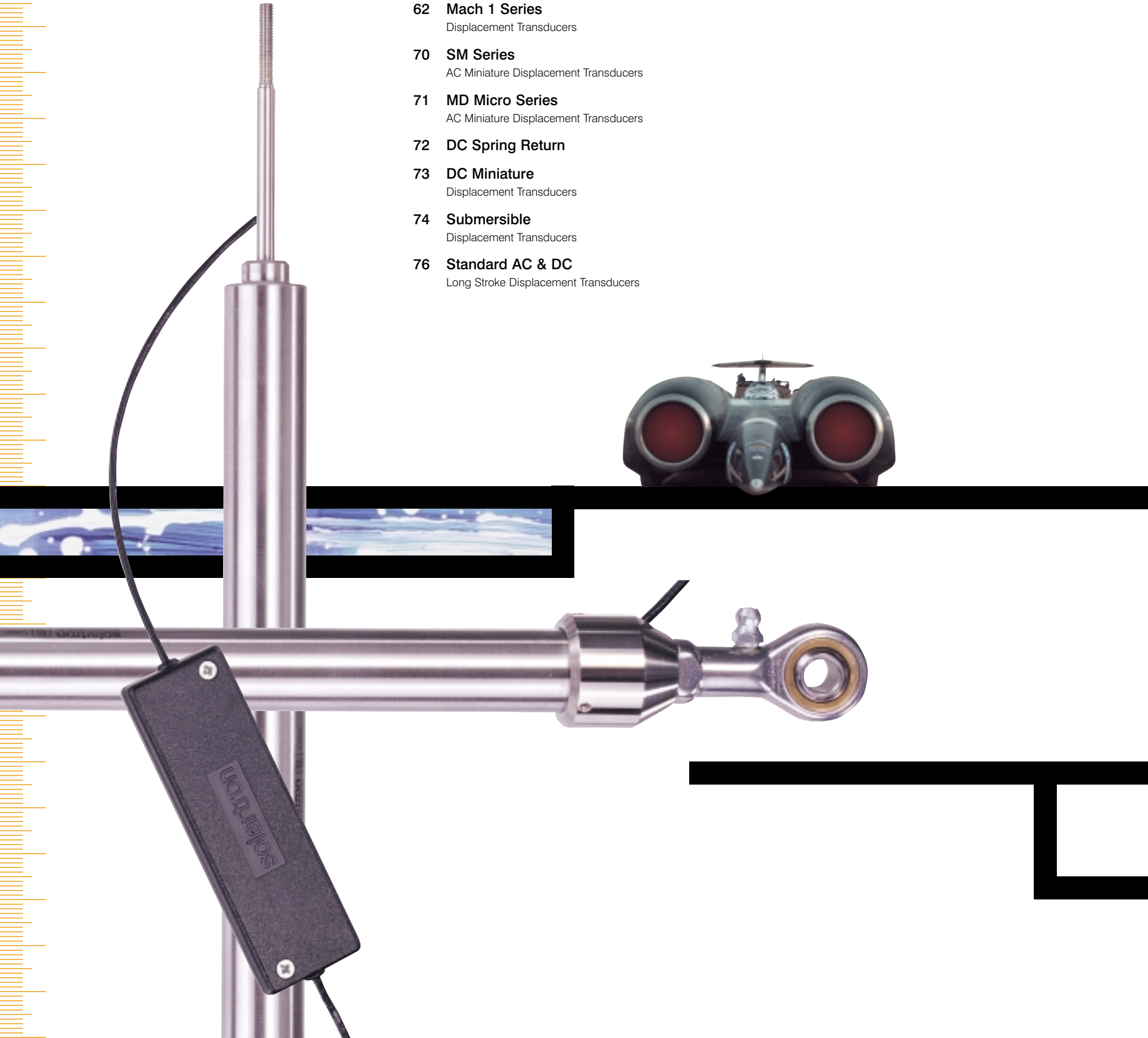
- 62 **Mach 1 Series**
Displacement Transducers
- 70 **SM Series**
AC Miniature Displacement Transducers
- 71 **MD Micro Series**
AC Miniature Displacement Transducers
- 72 **DC Spring Return**
- 73 **DC Miniature**
Displacement Transducers
- 74 **Submersible**
Displacement Transducers
- 76 **Standard AC & DC**
Long Stroke Displacement Transducers

From checking the notes issued by an automatic cash dispenser to controlling the active suspension on the Thrust SSC, Solartron's wide range of displacement transducers measure to laboratory standards in the real world conditions of vibration, shock and temperature.



质量

- LVDT technology
- Measuring stroke from $\pm 1\text{mm}$ to $\pm 300\text{mm}$
- Miniature transducers
- DC output (with external or internal electronic)
- Low cost version
- High temperature (200°C) version
- Submersible (100 Bar) version
- Custom design transducers



long stroke displacement transducers



	AC15 ACR15 DC15 DCR15	AC25 ACR25 DC25 DCR25	AC50 ACR50 DC50 DCR50	AC100 ACR100 DC100 DCR100	AC150 ACR150 DC150 DCR150	AC250 - DC250 -	AC300 - DC300 -
A*	45	60	85	145	197	298	349
B	97	156	280	450	552	755	857
C	20	20	20	20	19	19	19
D	3.17	4.0	4.0	4.75	4.75	4.75	4.75
E	19	19	19	25	25	25	25
F	25	25	32	32	32	32	32
G	M3	M4	M4	M5	M5	M5	M5
H	3.5	3.5	3.5	4.5	4.5	4.5	4.5

AC captive armature type	AC15	AC25	AC50	AC100	AC150	AC250	AC300
AC sprung armature type	ACR15	ACR25	ACR50	ACR100	ACR150	-	-
DC captive armature type	DC15	DC25	DC50	DC100	DC150	DC250	DC300
DC sprung armature type	DCR15	DCR25	DCR50	DCR100	DCR150	-	-
Linear measuring stroke, ±mm	15	25	50	100	150	250	300

Max stroke, \pm mm	22	35	62	125	178	279	330
Weight, g							
Body, including leads	60	96	170	600	900	1300	1600
Armature assembly	10	18	25	54	78	106	122
Spring rate	3.3	2.34	1.95	1.19	1.0		
Force at electrical zero, in g ACR	110	150	185	120	120		

Winding configuration	LVDT	LVDT	LVDT	LVDT	LVDT	LVDT	LVDT
Sensitivity, mV/V/mm (typical)	35	20	9.3	5	3.2	2.1	1.7
Energising current, mA	6	4	4	6	5	6	9
Output impedance, Ω	220	210	160	160	150	110	90
Input/Output phase shift, $^{\circ}$	7	9	10	7	7	5	2
Zero phase shift, kHz	2.4	2	1.6	2.6	23	7	5.5

<i>Electrical connections</i>	
Red & blue	Primary Energising
White	Secondary Signal
Green	Secondary OV
Yellow	Secondary centre tap (dc not connected)
Red & white	In phase for inward displacement

Winding configuration	LVDT	LVDT	LVDT	LVDT	LVDT	LVDT	LVDT
Sensitivity, mV/V/mm at 10V dc (typical)	280	165	60	20	13.3	8.0	6.6
Energising current at 10V, mA	10	18	40	40	40	40	40
Input voltage range, V	9 to 24	9 to 24	9 to 24	9 to 15	9 to15	9 to 15	9 to 15

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Red & blue	Primary Energising
White	Secondary Signal
Green	Secondary OV
Red & white	+ve output on white lead with respect to green for inward displacement

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