

PNEUMATIC FORCE ACTUATORS

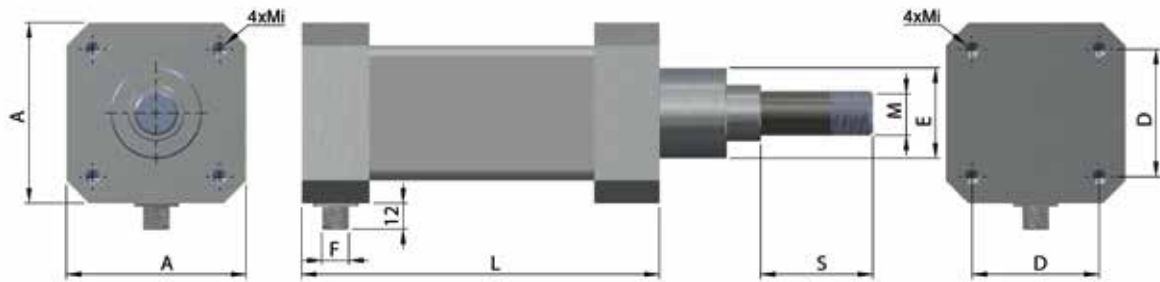
The Air series pneumatic actuators, used in **LiTeM** testing machines, have an aluminium housing with chrome-plated stainless steel moving parts, special low sensor gaskets and contactless displacement sensors integrated into the rod for nominally unlimited service life. The device continuously monitors the position of the actuator's piston with significantly higher precision than that of conventional potentiometer solutions.

Air series actuators output the displacement signal via a 4-pin male M12 connector on the rear of the housing. The air intake fittings are mounted at the opposite end of the housing.

Air series actuators are available with stroke from 50 to 2000 mm and static thrust of 1 to 7 kN, with 1 to 6 kN peak dynamic thrust.

TECHNICAL SPECIFICATIONS	A50	A63	A80	A100	A125
BORE (mm)	50	63	80	100	125
STATIC FORCE (6 bar)	1,2 kN	1,8 Kn	3 kN	4,5 kN	7,2 kN
DYNAMIC FORCE (5 bar)	1 kN	1,5 kN	2,5 kN	4 kN	6 kN
STROKE *	50-1000	50-2000	50-2000	50-2000	50-2000
MEASURE ACCURACY	±0,02mm per 100mm stroke				
MALE 4-PIN DISPLACEMENT OUTPUT CONNECTOR	M12				
OUTPUT SIGNAL (V)	~0-10				
FIXING SCREW	4x M8		4x M10		
SENSOR	Internal - integrated contactless				
AIR IN-OUT	Standard quick fitting, hose OD 10mm ID 8mm				
PRESSION OPERATING	6 bar				
PRESSION MAX	10 bar				

* It's recommended to use 50mm stroke for fatigue testing and 100mm for stiffness testing to optimize the air consumption



	A50	A63	A80	A100	A125
A (mm)	65	80	100	115	140
B (mm)	65	80	100	115	140
L (mm)	S+122		S+128	S+138	S+160
D (mm)	46,5	56,5	72	89	110
Mi	4x M8	4x M8	4x M10	4x M10	4x M10
S (mm)	50-1000	50 - 2000	50 - 2000	50 - 2000	50 - 2000
M	M12		M20x1,5		M27x2
F	M12	M12	M12	M12	M12
E	40	40	45	55	60

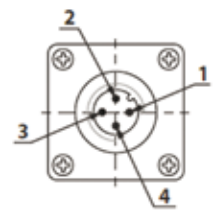
Air series actuators are supplied complete with a 5m data cable with SUBD9 terminal connector

INSTRUCTIONS FOR GOOD OPERATING SYSTEM

The cylinder with integrated magnetostrictive transducer must be installed far from magnetic field sources or at 50Hz (electrical engines, electrovalves etc.);
 The transducer supply 18...30Vdc have to be connect separatly from the system power supply;
 The transducer must be powered from nto distribuite networks and however the cable must be less then 30m lenght;
 We suggest to use filters for the output signal.



CYLINDER ELECTRICAL CONNECTIONS
4 PIN M12 MALE CONNECTOR



CYLINDER ELECTRICAL CONNECTIONS	
Pin number cylinder connector	
1	Power supply 18...30Vdc (+)
2	Analogue output signal (01 / 9.9 Vdc)
3	Ground power (-)
4	Ground output signal (-)

- GENERAL INFORMATION**
info@litem.info
- SALES**
sales@litem.info
- TECHNICAL**
support@litem.info

DRC Srl
sales and production
Via Montesicuro snc - 60131 Ancona (Italy)
Tel (+39) 071 80 36 077

EnginLAB Srl
research and development
Via Verità 3/a - 35131 Padova (Italy)
Tel (+39) 049 20 21 489

