

NATIONAL AEROSPACE STANDARD

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 610 SHOREHAM BUILDING, WASHINGTON 5, D. C.

SPECIFICATION
FITTING, ENGINE CABLE CONTROL, QUICK DISCONNECT

1. TYPE

- 1.1 THIS SPECIFICATION COVERS QUICK DISCONNECT FITTINGS FOR USE ON ENGINE CABLE CONTROLS.
- 1.2 QUICK DISCONNECT FITTINGS FOR PUSH-PULL ENGINE CONTROLS HAVE BEEN REMOVED FROM THIS SPECIFICATION AND SHALL CONFORM TO SPECIFICATION MIL-F-5442.

2. GENERAL REQUIREMENTS

2.1 CONSTRUCTION

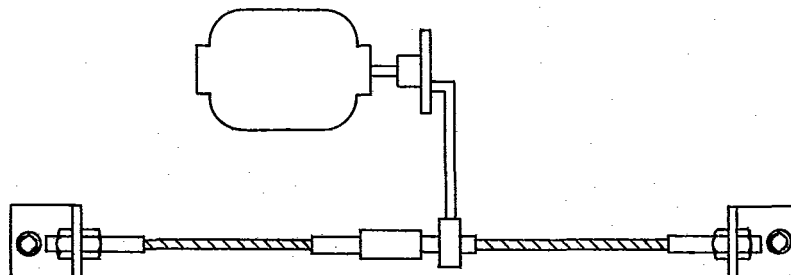
- 2.1.1 THREADS - SHALL CONFORM TO SPECIFICATION MIL-S-7742, CLASS 3A OR CLASS 3B, AS APPLICABLE.
- 2.1.2 MATERIAL - ALL PARTS SHALL BE OF SUCH MATERIAL THAT THE FITTING WILL MEET ALL CONDITIONS LISTED BELOW.

2.2 FINISH

- 2.2.1 ALUMINUM ALLOY PARTS - SHALL BE ANODIZED IN ACCORDANCE WITH SPECIFICATION MIL-A-8625.
- 2.2.2 CORRODIBLE METALLIC PARTS - SHALL BE SUITABLY PLATED TO RESIST CORROSION DURING THE NORMAL SERVICE LIFE OF THE PART. CADMIUM PLATING IN ACCORDANCE WITH SPECIFICATION QQ-P-416 IS DESIRABLE WHERE PRACTICABLE. PARTS TO BE WELDED, SWAGED OR THREADED SHALL NOT BE PLATED.
- 2.2.3 ALL PARTS SHALL BE SUITABLY PRIMED AND PAINTED WHEN CALLED FOR ON THE APPLICABLE DETAIL DRAWINGS BY PURCHASER.

2.3 PERFORMANCE

- 2.3.1 ENDURANCE - THE FITTINGS SHALL SHOW NO APPRECIABLE EVIDENCE OF WEAR OR DISTORTION FOLLOWING 60,000 CYCLES OF LOADING FROM A MAXIMUM OF 20% OF DESIGN LOAD IN TENSION TO A MAXIMUM OF 20% OF DESIGN LOAD IN COMPRESSION AT A FREQUENCY OF NOT MORE THAN 100 CYCLES PER MINUTE.
- 2.3.2 WEAR RESISTANCE - THE FITTINGS SHALL OPERATE SATISFACTORILY AFTER BEING CONNECTED AND DISCONNECTED 100 TIMES.
- 2.3.3 STRENGTH - THE FITTINGS SHALL WITHSTAND THE APPLICATION OF A TENSILE LOAD AS FOLLOWS:
- | CABLE SIZE | DESIGN LOAD |
|------------|-------------|
| 1/16 | 480 |
| 3/32 | 920 |
| 1/8 | 2,000 |
- 2.3.4 CORROSION RESISTANCE - FITTINGS SHALL OPERATE SATISFACTORILY AFTER BEING EXPOSED TO A SALT SPRAY FOR 24 HOURS UNDER CONDITION PRESCRIBED IN SPECIFICATION QQ-M-151.
- 2.3.5 VIBRATION RESISTANCE - FITTING SHALL OPERATE SATISFACTORILY AND NO PARTS SHALL BECOME LOOSE OR INSECURE FOLLOWING 100 HOURS OF VIBRATION AT A FREQUENCY OF APPROXIMATELY 2,200 VIBRATIONS PER MINUTE WITH A TENSILE LOAD OF 20% OF THE DESIGN LOAD AND WITH AN AMPLITUDE OF .25 INCH. THE FITTING TO BE MOUNTED BETWEEN TWO SUITABLE (APPROXIMATELY 1-1/2 FOOT) LENGTHS OF CABLE.



② INACTIVE FOR NEW DESIGN AFTER
1 OCT. 1962 NO SUPERSEDING STANDARD

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CUSTODIAN:

NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT
SPECIFICATION

TITLE

FITTING, ENGINE CABLE CONTROL
QUICK DISCONNECTCLASSIFICATION
SPECIFICATION

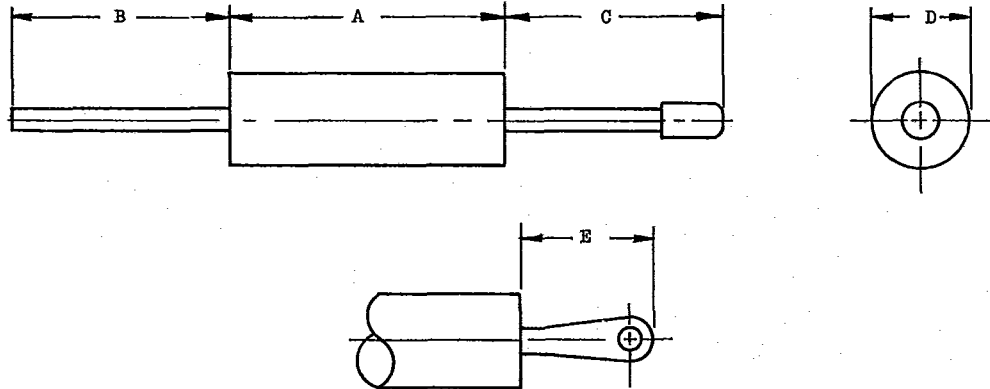
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3. DETAIL REQUIREMENTS

- 3.1 DESIGN - THE FITTINGS SHALL BE DESIGNED TO PROVIDE A DIRECT MECHANICAL CONNECTION WITH PROVISIONS FOR SECURELY MAINTAINING THE CONNECTION.
- 3.2 3.1.1 FITTINGS SHALL BE DESIGNED TO PROVIDE A MEANS FOR RAPID SEPARATION AND CONNECTION OF CABLES. IT IS DESIRABLE THAT IT NOT BE NECESSARY TO LOOSEN TURNBUCKLES TO ACCOMPLISH THE SEPARATION.
- 3.2 SIZE
- 3.2.1 CABLE SIZE - FITTINGS SHALL BE DESIGNED FOR CONTROL CABLES OF THE FOLLOWING SIZES: 1/16, 3/32 AND 1/8 INCH DIAMETER.
- 3.3 THE ENVELOPE SIZE OF THE ASSEMBLED FITTING SHALL NOT EXCEED SIZE SHOWN ON THE FOLLOWING SKETCH:



CABLE SIZE	THREAD	A	B	C	D	E
1/16	6-40 UNF-3A	1.25	1.25	1.62	.56	.75
3/32	10-32 UNF-3A	1.50	1.38	1.62	.62	.94
1/8	1/4-28 UNF-3A	2.00	1.75	1.62	.62	1.12

NOTE: SEE EQUIVALENT AN OR NAS STANDARDS FOR
DETAIL DIMENSIONS OF ENDS.

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