

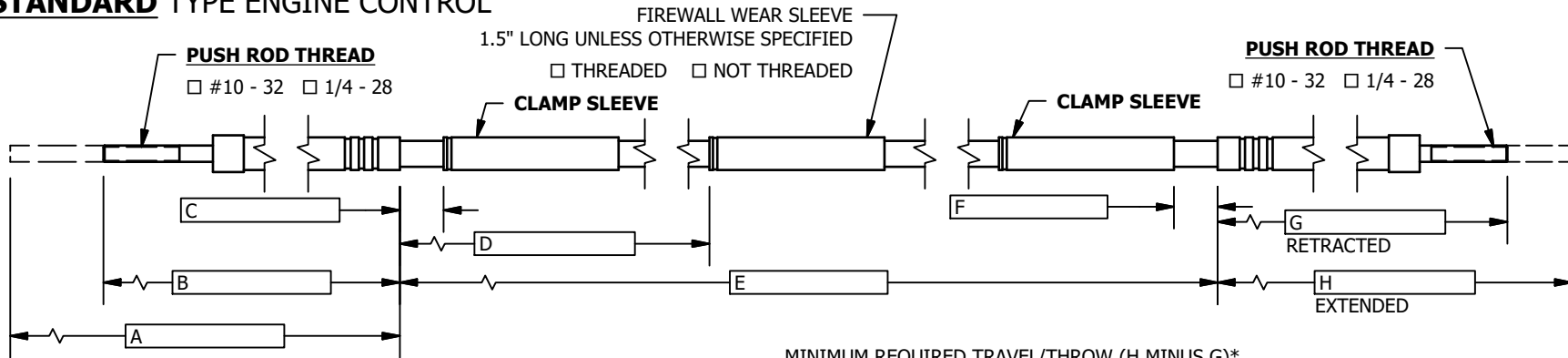
McFarlane Aviation, LLC.
682 E. 1700 Road, BUILDING C
Baldwin City, KS 66006



McFarlane Aviation Products

800-544-8594
(785) 594-2741
(785) 594-3922 Fax
www.mcfarlaneaviation.com
customparts@mcfarlaneaviation.com

STANDARD TYPE ENGINE CONTROL



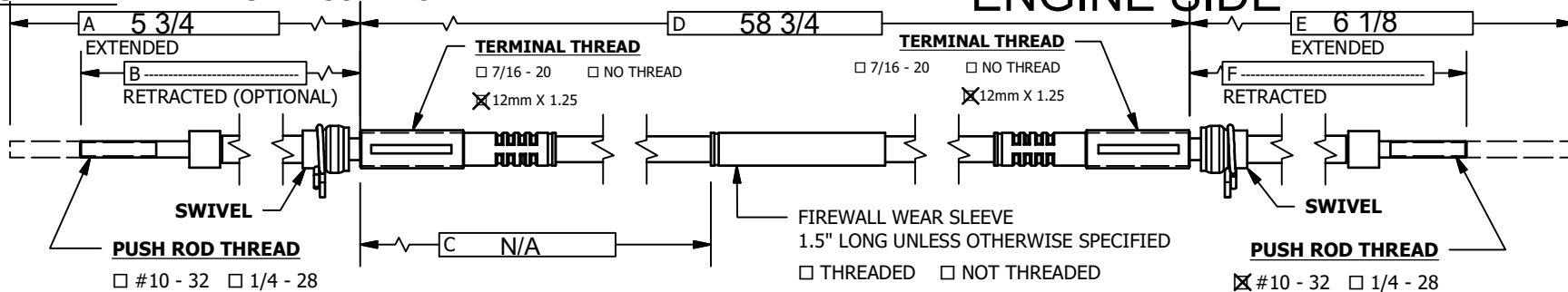
REQUIRED DIMENSIONS

A: _____
C: _____
D: _____
E: _____
F: _____
H: _____

ADD OTHER DIMENSIONS

MINIMUM REQUIRED TRAVEL/THROW (H MINUS G)* _____
*NOTE THAT TRAVEL WILL BE REDUCED WHEN ROUTING THROUGH BENDS AND AT TIGHT RADII.
FOR DESIGNS LONGER THAN 8FT OR COMPLEX ROUTING, CALL MCFARLANE ENGINEERING TO DISCUSS THE TRAVEL.

SWIVEL TYPE ENGINE CONTROL



REQUIRED DIMENSIONS

A: _____
C: _____
D: _____
E: _____
F: _____

ADD OTHER DIMENSIONS

MINIMUM REQUIRED TRAVEL/THROW (E MINUS F)* **2 1/4**
*NOTE THAT TRAVEL WILL BE REDUCED WHEN ROUTING THROUGH BENDS AND AT TIGHT RADII.
FOR DESIGNS LONGER THAN 8FT OR COMPLEX ROUTING, CALL MCFARLANE ENGINEERING TO DISCUSS THE TRAVEL.

QUADRANT SIDE

I REQUEST MCFARLANE AVIATION, LLC. TO MANUFACTURE A PART PER THE DATA ON THIS FORM. I UNDERSTAND THAT I AM SOLELY RESPONSIBLE FOR ENSURING SUITABILITY OF THE PART FOR MY INTENDED APPLICATION. THIS DATA WAS EITHER PROVIDED BY ME OR DEVELOPED JOINTLY WITH MCFARLANE AVIATION, LLC. ON MY BEHALF AND WITH MY PARTICIPATION AND SUPERVISION. I UNDERSTAND THAT UNLESS OTHERWISE AGREED, MCFARLANE AVIATION, LLC. MAY USE THIS DATA FOR ANY PURPOSE. I UNDERSTAND THAT THIS PART IS NOT FAA APPROVED. AND I CERTIFY THAT IF THIS PART IS TO BE INSTALLED ON A TYPE-CERTIFICATED AIRCRAFT IT WILL BE INSTALLED IN FULL COMPLIANCE WITH ONE OF THE EXCEPTIONS LISTED IN 14 CFR 21.9(a).

Backlash, which is apparent as lost motion under push-pull input forces, is caused by the core wire of the control assembly moving from the inside to the outside of the bends in the conduit with the change in direction of movement. It is a function of the length of the control, the clearance between the wire and the conduit, the input force, and the total number of degrees of bend in the installed control. While designing and constructing a control, McFarlane Aviation can take steps to mitigate backlash. To do so, a complete understanding of the operating loads, routing, and backlash tolerance is required.

SIGNATURE: _____ DATE: _____

CUSTOMER NAME: _____ CONTACT NAME: _____

ADDRESS: _____

EMAIL: _____

PHONE NUMBER: _____ AIRCRAFT MAKE: _____

FAX NUMBER: _____ MODEL: _____

SPECIAL REQUIREMENTS/NOTES:

Mixture

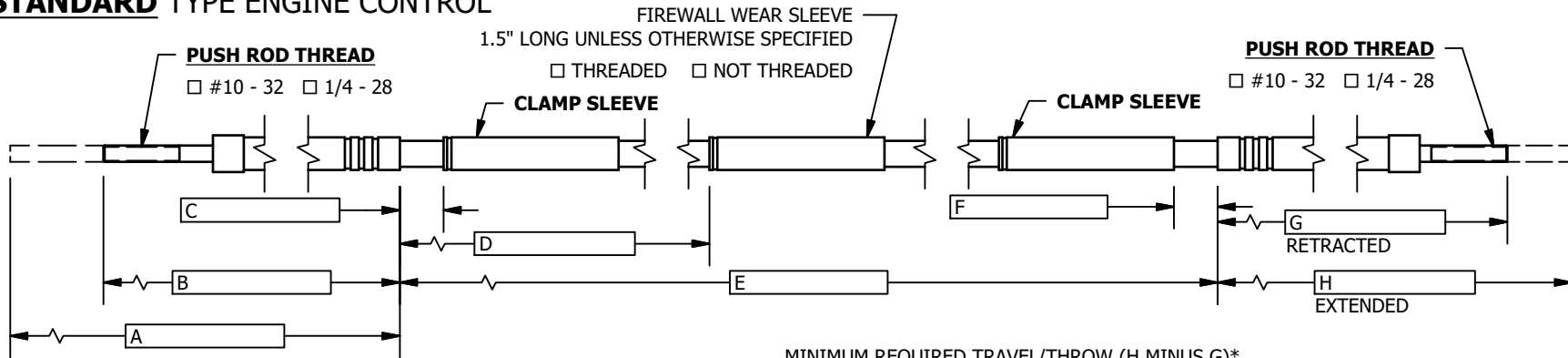
McFarlane Aviation, LLC.
682 E. 1700 Road, BUILDING C
Baldwin City, KS 66006



McFarlane Aviation Products

800-544-8594
(785) 594-2741
(785) 594-3922 Fax
www.mcfarlaneaviation.com
customparts@mcfarlaneaviation.com

STANDARD TYPE ENGINE CONTROL



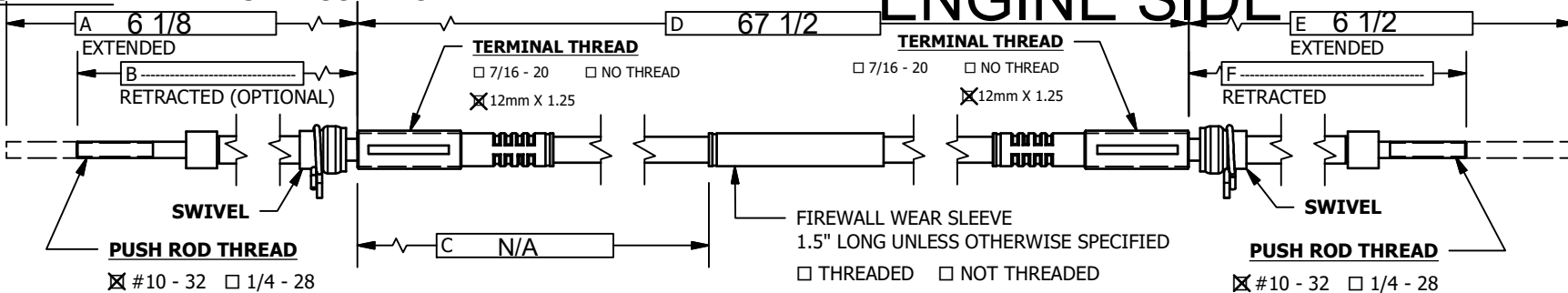
REQUIRED DIMENSIONS

A: _____
C: _____
D: _____
E: _____
F: _____
H: _____

ADD OTHER DIMENSIONS

MINIMUM REQUIRED TRAVEL/THROW (H MINUS G)* _____
*NOTE THAT TRAVEL WILL BE REDUCED WHEN ROUTING THROUGH BENDS AND AT TIGHT RADII.
FOR DESIGNS LONGER THAN 8FT OR COMPLEX ROUTING, CALL MCFARLANE ENGINEERING TO DISCUSS THE TRAVEL.

SWIVEL TYPE ENGINE CONTROL



REQUIRED DIMENSIONS

A: _____
C: _____
D: _____
E: _____
F: _____

ADD OTHER DIMENSIONS

MINIMUM REQUIRED TRAVEL/THROW (E MINUS F)* **1 1/2"**
*NOTE THAT TRAVEL WILL BE REDUCED WHEN ROUTING THROUGH BENDS AND AT TIGHT RADII.
FOR DESIGNS LONGER THAN 8FT OR COMPLEX ROUTING, CALL MCFARLANE ENGINEERING TO DISCUSS THE TRAVEL.

QUADRANT SIDE

I REQUEST MCFARLANE AVIATION, LLC. TO MANUFACTURE A PART PER THE DATA ON THIS FORM. I UNDERSTAND THAT I AM SOLELY RESPONSIBLE FOR ENSURING SUITABILITY OF THE PART FOR MY INTENDED APPLICATION. THIS DATA WAS EITHER PROVIDED BY ME OR DEVELOPED JOINTLY WITH MCFARLANE AVIATION, LLC. ON MY BEHALF AND WITH MY PARTICIPATION AND SUPERVISION. I UNDERSTAND THAT UNLESS OTHERWISE AGREED, MCFARLANE AVIATION, LLC. MAY USE THIS DATA FOR ANY PURPOSE. I UNDERSTAND THAT THIS PART IS NOT FAA APPROVED. AND I CERTIFY THAT IF THIS PART IS TO BE INSTALLED ON A TYPE-CERTIFICATED AIRCRAFT IT WILL BE INSTALLED IN FULL COMPLIANCE WITH ONE OF THE EXCEPTIONS LISTED IN 14 CFR 21.9(a).

Backlash, which is apparent as lost motion under push-pull input forces, is caused by the core wire of the control assembly moving from the inside to the outside of the bends in the conduit with the change in direction of movement. It is a function of the length of the control, the clearance between the wire and the conduit, the input force, and the total number of degrees of bend in the installed control. While designing and constructing a control, McFarlane Aviation can take steps to mitigate backlash. To do so, a complete understanding of the operating loads, routing, and backlash tolerance is required.

SIGNATURE: _____ DATE: _____

CUSTOMER NAME: _____ CONTACT NAME: _____

ADDRESS: _____

EMAIL: _____

PHONE NUMBER: _____ AIRCRAFT MAKE: _____

FAX NUMBER: _____ MODEL: _____

SPECIAL REQUIREMENTS/NOTES:

Prop

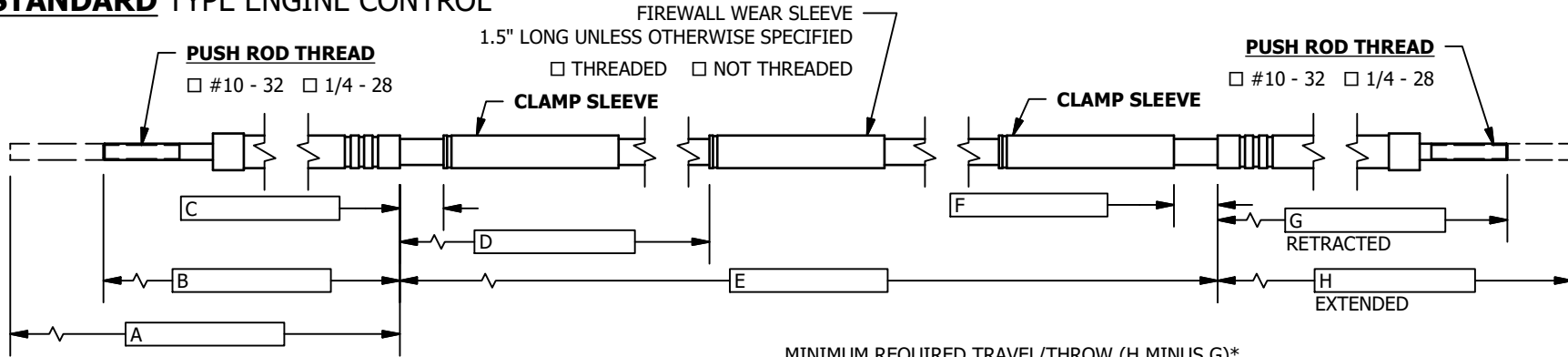
McFarlane Aviation, LLC.
682 E. 1700 Road, BUILDING C
Baldwin City, KS 66006



McFarlane Aviation Products

800-544-8594
(785) 594-2741
(785) 594-3922 Fax
www.mcfarlaneaviation.com
customparts@mcfarlaneaviation.com

STANDARD TYPE ENGINE CONTROL



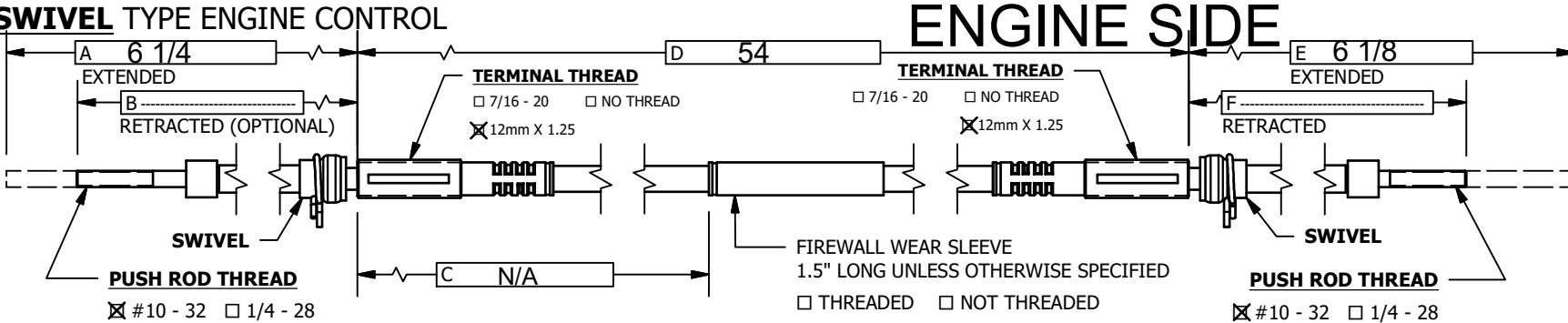
REQUIRED DIMENSIONS

A: _____
C: _____
D: _____
E: _____
F: _____
H: _____

ADD OTHER DIMENSIONS

MINIMUM REQUIRED TRAVEL/THROW (H MINUS G)* _____
*NOTE THAT TRAVEL WILL BE REDUCED WHEN ROUTING THROUGH BENDS AND AT TIGHT RADII.
FOR DESIGNS LONGER THAN 8FT OR COMPLEX ROUTING, CALL MCFARLANE ENGINEERING TO DISCUSS THE TRAVEL.

SWIVEL TYPE ENGINE CONTROL



REQUIRED DIMENSIONS

A: _____
C: _____
D: _____
E: _____
F: _____

ADD OTHER DIMENSIONS

QUADRANT SIDE

MINIMUM REQUIRED TRAVEL/THROW (E MINUS F)* **2 5/8**
*NOTE THAT TRAVEL WILL BE REDUCED WHEN ROUTING THROUGH BENDS AND AT TIGHT RADII.
FOR DESIGNS LONGER THAN 8FT OR COMPLEX ROUTING, CALL MCFARLANE ENGINEERING TO DISCUSS THE TRAVEL.

I REQUEST MCFARLANE AVIATION, LLC. TO MANUFACTURE A PART PER THE DATA ON THIS FORM. I UNDERSTAND THAT I AM SOLELY RESPONSIBLE FOR ENSURING SUITABILITY OF THE PART FOR MY INTENDED APPLICATION. THIS DATA WAS EITHER PROVIDED BY ME OR DEVELOPED JOINTLY WITH MCFARLANE AVIATION, LLC. ON MY BEHALF AND WITH MY PARTICIPATION AND SUPERVISION. I UNDERSTAND THAT UNLESS OTHERWISE AGREED, MCFARLANE AVIATION, LLC. MAY USE THIS DATA FOR ANY PURPOSE. I UNDERSTAND THAT THIS PART IS NOT FAA APPROVED. AND I CERTIFY THAT IF THIS PART IS TO BE INSTALLED ON A TYPE-CERTIFICATED AIRCRAFT IT WILL BE INSTALLED IN FULL COMPLIANCE WITH ONE OF THE EXCEPTIONS LISTED IN 14 CFR 21.9(a).

Backlash, which is apparent as lost motion under push-pull input forces, is caused by the core wire of the control assembly moving from the inside to the outside of the bends in the conduit with the change in direction of movement. It is a function of the length of the control, the clearance between the wire and the conduit, the input force, and the total number of degrees of bend in the installed control. While designing and constructing a control, McFarlane Aviation can take steps to mitigate backlash. To do so, a complete understanding of the operating loads, routing, and backlash tolerance is required.

SIGNATURE: _____ DATE: _____

CUSTOMER NAME: _____ CONTACT NAME: _____

ADDRESS: _____

EMAIL: _____

PHONE NUMBER: _____ AIRCRAFT MAKE: _____

FAX NUMBER: _____ MODEL: _____

SPECIAL REQUIREMENTS/NOTES:

Throttle