

COILS AND ELECTRONIC CONTROLS

Standard Coil Weather-Proofing (obsolete Jan.1, 2002)

INTRODUCTION

For SV Series valves, the standard coil weather-proofing method described here is being replaced by the new Series E Water/Weather Resistant Coils described on pages 3.400.1-7. However, the new Series E Coils are not currently available for most PV, TS or ZL Series Proportional valves (consult factory). The older method of weather-proofing described on these pages will continue to be available as service parts and for use on existing applications where coil performance or space limitations require it.

Standard HydraForce coils are encapsulated and weather-resistant, having been successfully applied in many mobile and industrial installations where the coil is exposed. However, these coils are not hermetically sealed against moisture under all conditions.

Standard HydraForce coils must be protected if both of the following conditions apply:

- The coil is run continuously, causing heating of the materials and resultant separation of the plastic and metal parts in cool-down contraction.
- Under the above if water is present and can pool at the top or bottom metal washer surface.

Application experience indicates that higher voltage coils are more susceptible to damage from water due to thin wire diameters. Extra care should be given to specification for AC service applications.

WEATHER-PROOFING METHOD

All electrical devices are sensitive to water intrusion and must be insulated against contact if moisture is present. This is done by creating a barrier or blocking means to prevent intimate contact of the water and copper.

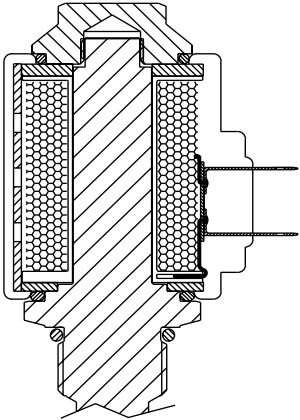
The HydraForce weather-proofing system described here uses external fluorocarbon O-rings positioned and retained at potential entry points on the coil. Various sizes and types of solenoid cartridges require different installation methods as illustrated on the opposite page. Some of these are retrofit-able, while others are not. See the table below.

Model Group	Armature Type	Installation Type	Field Conversion	Service Kit P/N
PV7x-xx	Proportional	E/H	Yes/All	6260145
SL08-22	Pull	A	No	6260100
SL38/58-22	Pull	A	Yes	6260130
SV08-20, 22, 24, 25, 26, 30, 31, 33, 40, 41, 42, 44, 45, 46	Pull	A	No	6260100
SV08-21, 23	Push	B	No	6260105
SV08-47A, 47C, 47D	Push/Pull	C/D	Yes/All	C-6260111 D-6260106
SV10-20, 22, 24, 25, 31, 33, 34, 40, 41, 42, 43, 44, 45	Pull	A/F	No	A-6260130 F-6260110
SV10-21, 23	Push	B/G	No	B-6260135 G-6260115
SV10-47A, 47B, 47C, 47D	Push/Pull	C/D	No	C-6260200 D-TBD
SV38/58-26	Pull	A/F	No	A-6260130 F-6260110
SV58-20, 22, 24, 25, 30, 40, 41, 42, 44	Pull	A/F	No	A-6260130 F-6260110
SV58-21, 23	Push	B	No	6260135
SV12-20, 22	Pull	A	Yes/All	6260130
SV12-21, 23	Push	B	Yes/All	6260135
SV16-20, 22	Pull	A	Yes/All	6260130
SV16-21, 23	Push	B	Yes/All	6260135

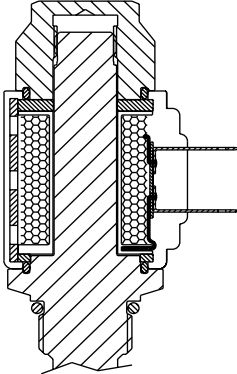
NOTE: Torque weather-proofing nuts to 0.07–0.10 Nm (7–10 ft. lbs.) max.

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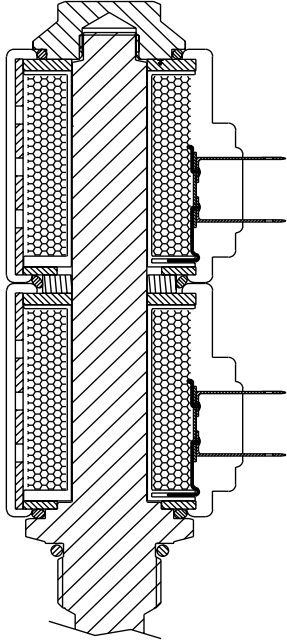
A
SVxx
Pull-Type



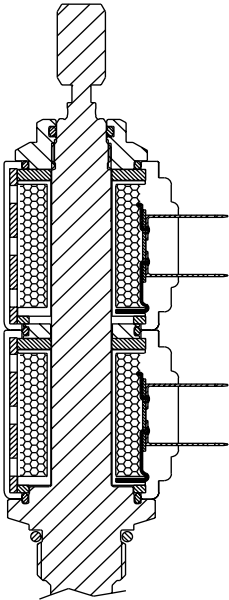
B
SVxx
Push-Type



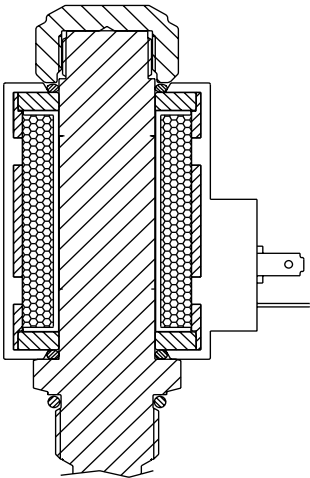
C
SVxx-47
Push/Pull-Type



D
SVxx-47 with Push/Pull
Manual Override



E
PV7x
Proportional



H
PV7x - Proportional
w/Manual Override

