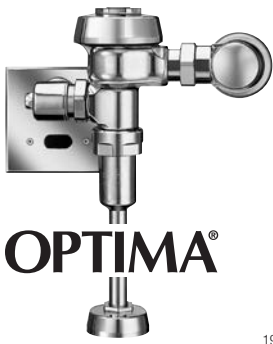


# Optima® Flushometers

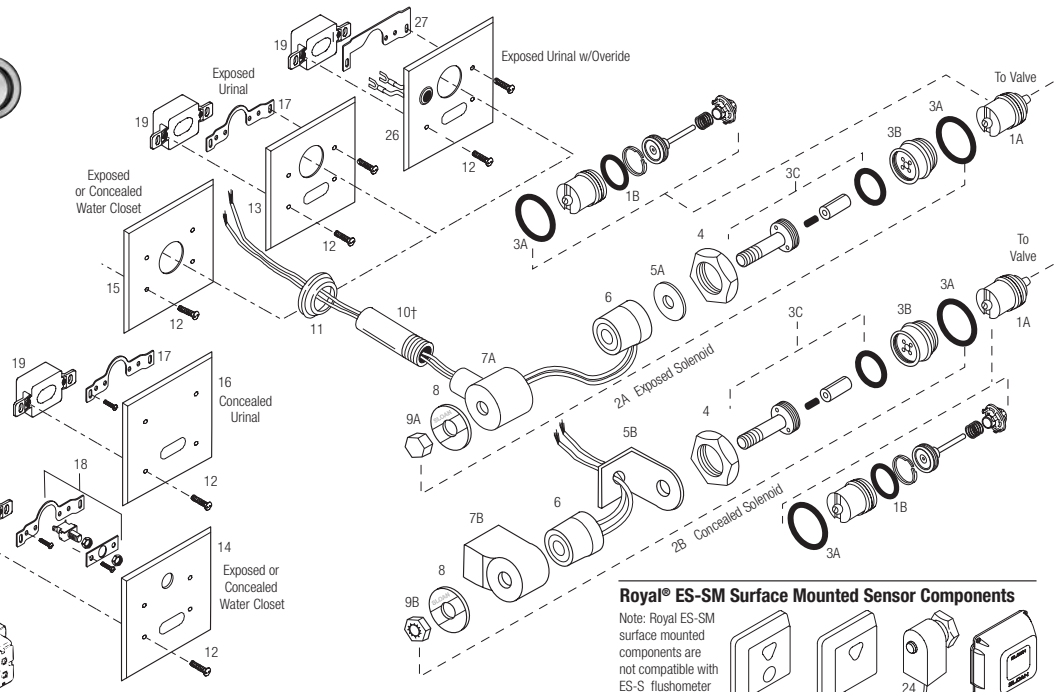
Old Royal® until 05/09, current Sloan/Regal®



**OPTIMA®**

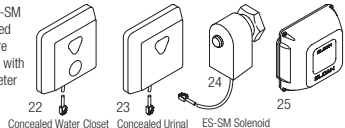
ABBREVIATIONS:  
 CP - Chrome Plated  
 RB - Rough Brass  
 gpf - gallons per flush  
 Lpf - Liters per flush

NOTE: Gang box is not supplied.



**Royal® ES-SM Surface Mounted Sensor Components**

Note: Royal ES-SM surface mounted components are not compatible with ES-S flushometer components.



**SOLENOID/SENSOR PARTS AND ASSEMBLIES LIST**

Item No.	Code No.	Part No.	Description
1A.	<b>3305043</b>	EL-128-A	Actuator Cartridge Assembly Repair Kit Includes Spring, Plunger Guide, Solenoid Valve Seat, Valve Piston Assembly, and O-Ring (also available for ES-SM flushometers)
1B.	<b>0305135</b>	EL-110	O-Ring
2A.	<b>0305328</b>	EL-124-1	120V only (no sensor)
	<b>3305044</b>	EL-1029-A	CP Cartridge/Solenoid Kit EL-124-1 (120V) and EL128-A
	<b>0305329</b>	EL-124-2	24 VAC Solenoid Assembly (exposed installation) Includes Handle Coupling, 24 VAC Coil, Face Plate for 24 VAC Solenoid, Solenoid Adapter, Solenoid Shaft Assembly, Nut for Solenoid, Solenoid Housing, Solenoid Flux Plate, and O-Ring
	<b>3305045</b>	EL-1028-A	CP Cartridge/Solenoid Kit EL-124-2 (24V) and EL128-A
2B.	<b>0305330</b>	EL-138-1	120V only (no sensor)
	<b>0305331</b>	EL-138-2	24 VAC Solenoid Assembly (concealed installation) Includes Handle Coupling, 24 VAC Coil, Face Plate for 24 VAC Solenoid, Solenoid Adapter, Solenoid Shaft Assembly, Nut for Solenoid, Solenoid Base Plate and Solenoid Cover Assembly
3A.	<b>0337086</b>	DO-22	O-Ring
3B.	<b>0305132</b>	EL-104	RB Adapter for Solenoid
3C.	<b>0305165</b>	EL-163-A	Solenoid Shaft Assembly Includes Gasket, Plunger, Plunger Spring, and Solenoid Shaft
4.	<b>0301082</b>	A-6	CP Handle Coupling (exposed installation)
5A.	<b>0305166</b>	EL-164	Solenoid Flux Plate (exposed installation) fine thread
5B.	—	EL-542	N/A Separately
6.	<b>0305119</b>	EL-165-1	120 V Coil
	<b>0305118</b>	EL-165-2	24 VAC Coil
7A.	<b>0345120</b>	EL-162-2	CP Solenoid Housing (exposed installation) fine thread
	<b>0305164</b>	EL-162-1	CP Solenoid Housing (120V) course thread also used on pre-2001 24 V
7B.	<b>0305336</b>	EL-541-A	Solenoid Cover Assembly (Includes Flux Plate)
8.	<b>0305127</b>	EL-102-2	Face Plate for 24 VAC Solenoid (exposed installation)

Item No.	Code No.	Part No.	Description
9A.	<b>0305125</b>	EL-101	CP Nut for Solenoid (exposed installation)
9B.	<b>0305167</b>	EL-166	Housing Nut for Solenoid (concealed installation)
10.	<b>0306249</b>	F-15	Tail †
	<b>0305145</b>	EL-123-A	Old Style ESS 24V course thread (120V also)
	<b>0305337PK</b>	EL-226	1-1/4" Extension for EL-123-A course thread
11.	<b>0345150</b>	EL-431-A	CP Flange Assembly (exposed installation)
	<b>0305139</b>	EL-176-A	Old Style ESS 24V course thread (120V also)
12.	<b>0305152</b>	EL-152	CP Screws (requires four screws per cover plate)
13.	<b>0305151</b>	EL-151	CP Cover Plate for Sensor and Solenoid Operator (Urinal only)
14.	<b>0305219</b>	EL-201	CP Cover Plate for Sensor and Override Button (Closet only)
15.	<b>0318066</b>	HY-66	CP Cover Plate for Solenoid Operator (Closet only)
16.	<b>0305161</b>	EL-161	CP Cover Plate for Sensor
17.	<b>0305323</b>	EL-168-A	Yoke Assembly (Urinal only)
18.	<b>0305324</b>	EL-141-A	Override Switch and Yoke Assembly (Closet only)
19.	<b>3305620</b>	EL-1500	Urinal Sensor Replacement Kit (Urinal only)
20.	<b>3305621</b>	EL-1500-L	Closet Sensor Replacement Kit (Closet only)
21.	<b>0345154</b>	EL-154	Transformer (120 VAC) (also available for ES-SM flushometers) 50 VA plate mount
	<b>0345999</b>	EL-342	Transformer (240 VAC) (also available for ES-SM flushometers) 50 VA plate mount
22.	<b>3345047</b>	EL-461	Surface Mounted Sensor and Override Button Assembly (closet only)
23.	<b>3345048</b>	EL-497	Surface Mounted Sensor Assembly (urinal only)
24.	<b>0305802</b>	EL-297	Solenoid Assembly
25.	<b>3365003</b>	ETF-492-A	Control Module
26.	<b>0345266</b>	EL-566-A	Exposed Plate with Override Button (Urinal only)
27.	<b>0345267</b>	EL-567-A	Yoke Assembly for EL-566-A
28.	<b>3345080</b>	EL-1026-A	ESS to TMO Retrofit Kit (Exposed)*
—	<b>0305148</b>	EL-227	Repair Tool Kit for EL-163-A Repair Kit
—	<b>0345016</b>	EL-387-A	Override Button Replacement for EL-566-A
—	<b>3345021</b>	EL-1010-A	O-ring Repair Kit*

† NOTE: For exposed & concealed solenoids manufactured before 2001 or not shown here, consult factory for individual part assembly.

\* Not Shown

Sensor Flushometers