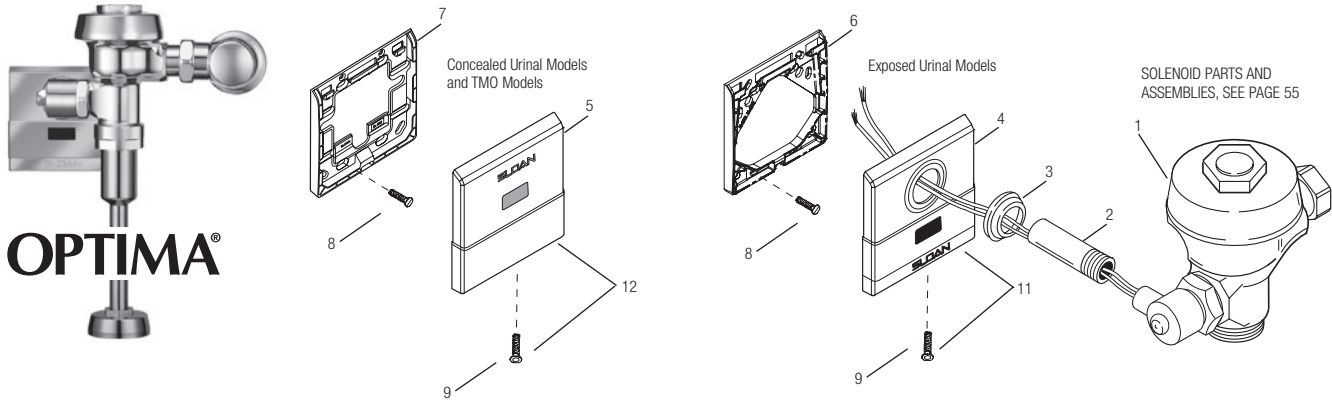


## Optima® Flushometers

Current style Royal® (after 09/26/10)



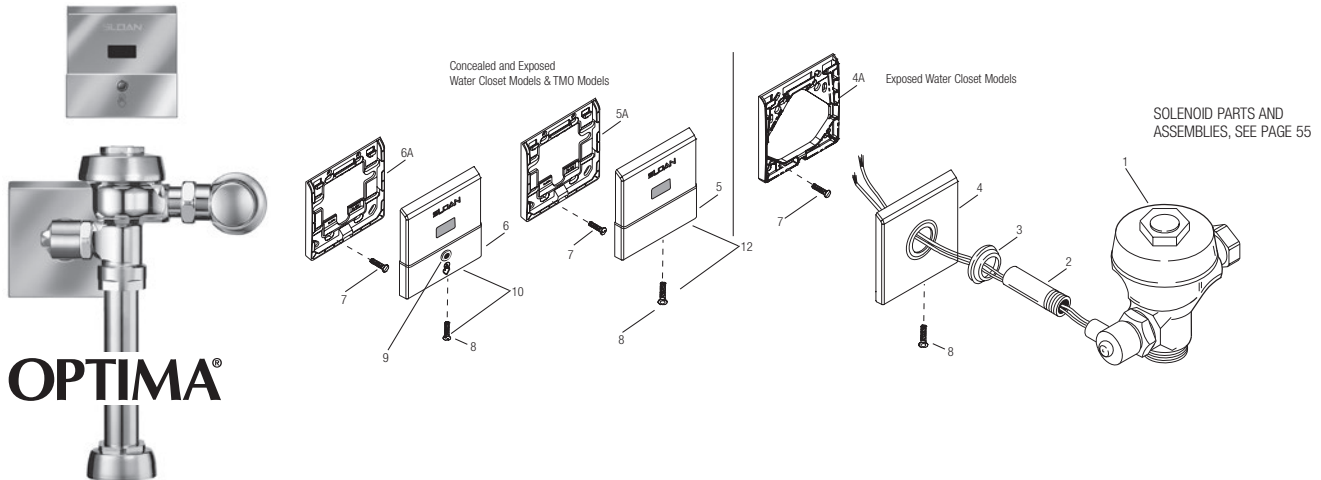
### CURRENT COVER AND MOUNTING PLATE PARTS FOR ROYAL® URINAL FLUSHOMETER

Item No.	Code No.	Part No.	Description
1.	‡		Solenoid Activated Valve Assembly
2.	<b>0306249PK</b>	F-15	Tail Assembly 3/4" x 6"
3.	<b>0345150</b>	EL-431-A	Flange Assembly
4.	<b>3305100</b>	EL-640-A	CP Cover Plate with Sensor and Mounting Hardware Assembled (Exposed Models) (includes EL-549 mounting plate)
5.	<b>3305101</b>	EL-645-A	CP Cover Plate with Sensor Assembled (Concealed Models) (includes EL-592 Mounting Plate)
6.	<b>0305251PK</b>	EL-549-A	Exposed Urinal Mounting Plate Kit

Item No.	Code No.	Part No.	Description
7.	<b>0305292PK</b>	EL-592-A	Concealed Urinal Mounting Plate Kit
8.	—		Screws (Flat Head Slotted #6/32)
9.	<b>5305100</b>	EL-674	Wall Plate Screw Kit (#6-32 x 15.87mm)
†	<b>3305620</b>	EL-1500	Urinal Sensor Replacement (Exposed and Concealed Models, not shown)

† NOTE: For exposed & concealed solenoids manufactured before 2003 or not shown here, consult factory for individual part assembly.

‡ Part number varies with valve model variation; consult factory. For Solenoid Breakdown, See Pg 48.



### CURRENT COVER AND MOUNTING PLATE PARTS FOR ROYAL® CLOSET FLUSHOMETER

Item No.	Code No.	Part No.	Description
1.	‡		Solenoid Activated Valve Assembly
2.	<b>0306249PK</b>	F-15	Tail Assembly†
3.	<b>0345150</b>	EL-431-A	Flange Assembly
4.	<b>3305105</b>	EL-625-A	CP Cover Plate with Mounting Hardware (Closet only) (includes EL-549 mounting plate)
4A.	<b>0305251PK</b>	EL-549	Exposed Closet Mounting Plate
5.	<b>3305107</b>	EL-635-A	Concealed CP TMO Cover Plate with Sensor (includes Mounting Kit)
5A.	<b>0305292PK</b>	EL-592	Concealed Closet TMO Mounting Plate

Item No.	Code No.	Part No.	Description
6.	<b>3305104</b>	EL-595-A	CP Cover Plate with Sensor and Override Switch Assembled (Closet only) Exposed ES-S
6A.	<b>0305292PK</b>	EL-592	Exposed & Concealed Closet Mounting Plate
7.	—		Screws (Flat Head Slotted #6/32)
†	<b>3305621</b>	EL-1500-L	Closet Sensor Replacement Kit (Closet only, not shown)
	<b>3345095</b>	EL-1034-AB	Button Assembly Repair Kit
8.	<b>5305100</b>	EL-674	Wall Plate Screw Kit (#6-32 x 15.87mm) (6 per kit)
9.	<b>3345095</b>	EL-1034-A	ESS Override Repair Kit for EL-595-A

### PLATES ONLY

Item No.	Code No.	Part No.	Description
10.	<b>3345090</b>	EL-1030-A	Plate Assembly Only w/ Set Screw*
11.	<b>3345091</b>	EL-1031-A	Plate Assembly Only w/ Set Screw*
12.	<b>3345092</b>	EL-1032-A	Plate Assembly Only w/ Set Screw*

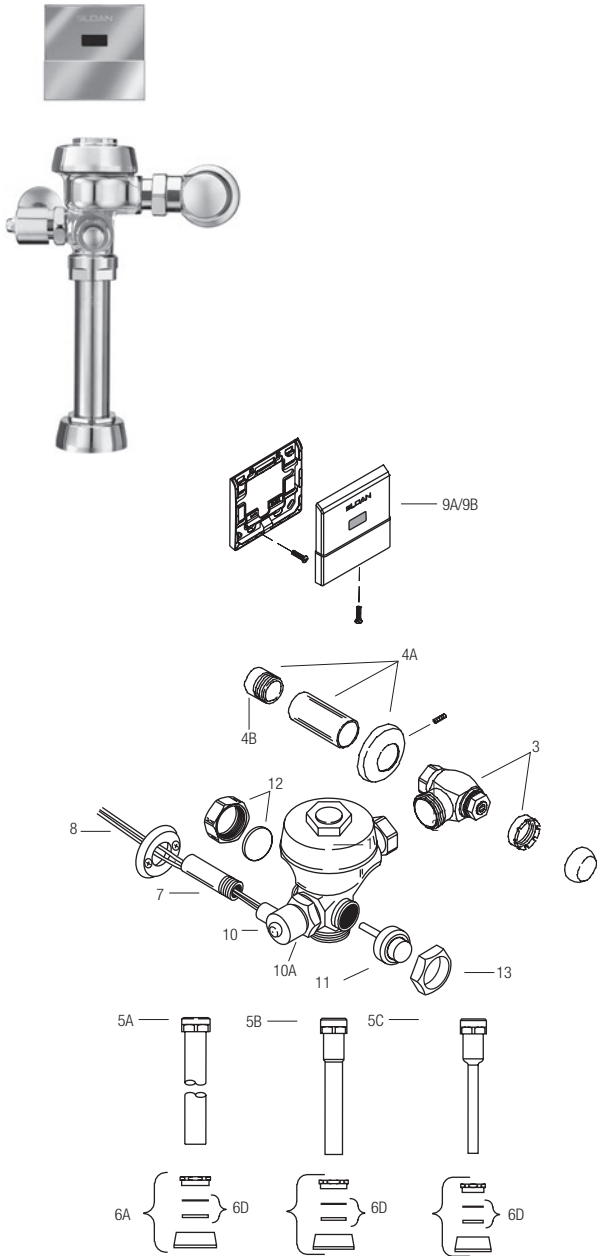
† NOTE: For exposed & concealed solenoids manufactured before 2003 or not shown here, consult factory for individual part assembly.

‡ Part number varies with valve model variation; consult factory.

\* Mounting plates do not include sensor.

For Solenoid Breakdown, See Pg 48.

# Optima® Royal® ES-S TMO Exposed Flushometers



## ROYAL® OPTIMA® ES-S TMO EXPOSED FLUSHOMETER PARTS LIST

Item No.	Code No.	Part No.	Description
1.	‡		Solenoid Activated Valve Assembly
2.	‡	H-700-A	Bak-Chek® Control Stop
3.	<b>3308772</b>	H-1010-A	Vandal Resistant Stop Cap
4A.	<b>3308782</b>	H-633-AA	1" (25 mm) Sweat Solder Kit
4B.	<b>3308603</b>	H-532	Adapter, 1" NPT to 1" Tube
	<b>3308607</b>	H-535.	Adapter, 3/4" NPT to 3/4" Tube
5A.	—	V-600-AA	1-1/2" (38 mm) Vacuum Breaker Assembly CP (Models 110/111, 115, and 116)
5B.	—	V-600-AA	1-1/4" (32 mm) x 9" (229 mm) Vacuum Breaker Assembly CP (Model 180 ES-S)
5C.	—	V-600-AA	3/4" (19 mm) x 9" (229 mm) Vacuum Breaker Assembly CP (Model 186 ES-S)
6A.	<b>0306146</b>	F-5-AT	1-1/2" (38 mm) Spud Coupling Assembly CP (Models 110/111, 115, and 116)
6B.	<b>0306140</b>	F-5-AU	1-1/4" (32 mm) Spud Coupling Assembly CP (Model 180)
6C.	<b>0306125</b>	F-5-AW	3/4" (19 mm) Spud Coupling Assembly CP (Model 186)
6D.	<b>SEE SLIP JOINT GASKETS AND RINGS ON TABLE BELOW</b>		
7.	‡	F-15	Tail Assembly
8.	<b>0302323PK</b>	B-110-A	Flange Assembly
9A.	<b>3305107</b>	EL-635-A	CP Cover Plate with Sensor (Mounting Plate and Screws included) (Models 110/111, 115, and 116)
9B.	<b>3305101</b>	EL-645-A	CP Cover Plate with Sensor (Mounting Plate and Screws included) (Models 180 and 186)
10.	<b>0305329</b>	EL-124-2	CP 24V Solenoid Assembly Only
10A	<b>3305043</b>	EL-128-A	Actuator Cartridge Assembly (not shown detailed)
	<b>3305045</b>	EL-1028-A	Solenoid Assembly w/ Cartridge Assembly
11.	<b>0303009</b>	C-2-A	True Mechanical Override Button
12.	<b>3325814</b>	EBV-1017-A	CP Valve Handle Cap
13.	<b>0301082PK</b>	A-6	CP Nut
—	<b>3345080</b>	EL-1026-A	ES-S to ES-S-TMO Conversion Kit Exposed includes Body/Tail assembly (no inside parts or covers) #11, #12, #13, DO-22 and EL-110 o-rings
—	<b>3305043</b>	EL-128-A	Actuator Cartridge
14.	<b>3302306</b>	B-51-A	Triple Seal Handle Repair Kit
15.	<b>3345080</b>	EL-126-A	ESS to TMO Retrofit Conversion Kit (Exposed*)
	<b>3388015</b>	H-1015-A	Flow Control Kit (HEU Only) (not Shown)

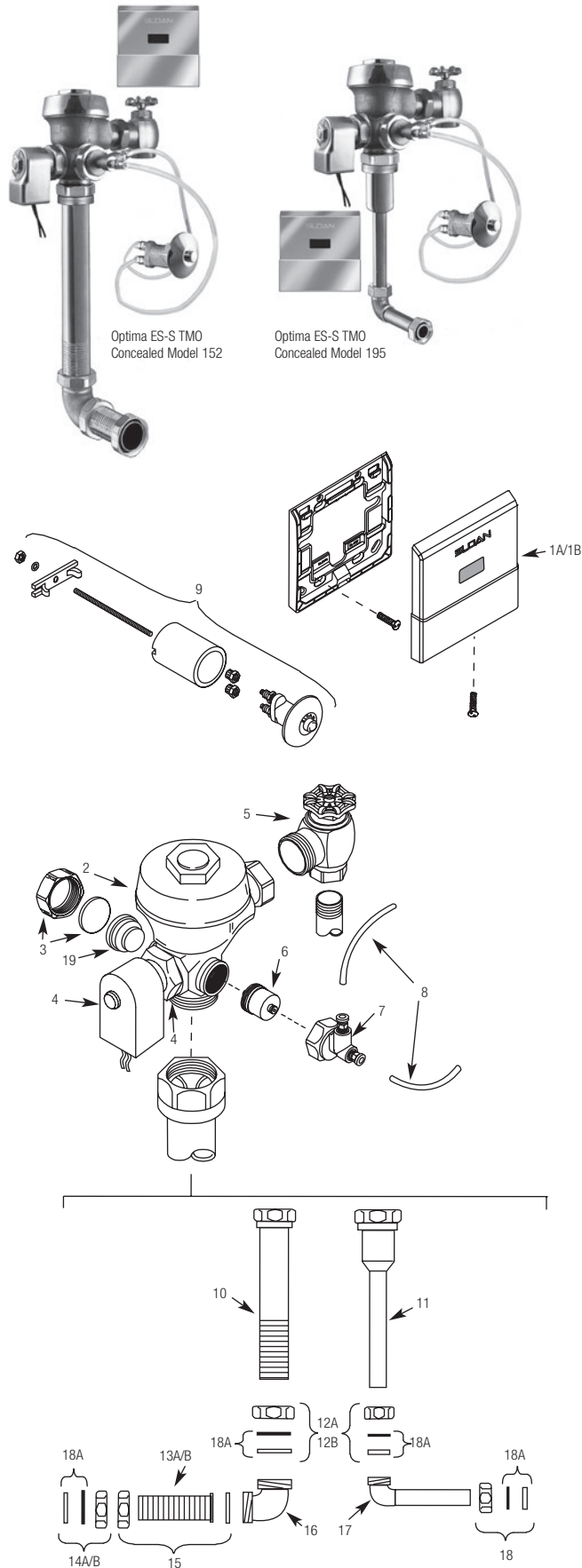
‡ Part number varies with valve model variation; consult factory.

\* Not shown

## ITEM 6D. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	<b>5306058</b>	F-3	Red Friction Ring
	<b>5322001</b>	VBF-5	Black Slip Joint Gasket
	<b>0319086/5319086</b>	S-30	Flexible Seat
	<b>0319079</b>	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	<b>0396062</b>	F-105	Slip Joint Gasket – Rigid
1-1/4"	<b>5306057</b>	F-3	Red Friction Ring
	<b>5322176</b>	VBF-5	Black Slip Joint Gasket
	<b>0307052/5307052</b>	G-21	Rigid Seat (rubber over brass)
1"	<b>5306056</b>	F-3	Red Friction Ring
	<b>5306115</b>	F-5	Black Slip Joint Gasket
3/4"	<b>5306055</b>	F-3	Red Friction Ring
	<b>5306113</b>	F-5	Black Slip Joint Gasket

## Optima® Royal® ES-S TMO Concealed Flushometers



### ROYAL® OPTIMA® ES-S TMO CONCEALED FLUSHOMETER PARTS LIST

Item No.	Code No.	Part No.	Description
1A.	<b>3305107</b>	EL-635-A	CP Cover Plate with Sensor (Mounting Screws included) (Model 152)
1B.	<b>3305101</b>	EL-645-A	CP Cover Plate with Sensor (Mounting Screws included) (Model 195)
2.	‡	—	Valve Assembly
3.	<b>3301093</b>	A-1013-A	Concealed Valve Handle Cap RB
4.	<b>0305331</b>	EL-138-2	RB Concealed 24V Solenoid Assembly
4A.	<b>3305043</b>	EL-128-A	Actuator Cartridge Assembly Only
5.	‡	H-730-A	RB Bak-Chek® Control Stop
6.	<b>3318001</b>	HY-83-A	Actuator Cartridge
7.	<b>3318005</b>	HY-109-A-1	Valve Actuator Assembly
8.	<b>0318093</b>	HY-30	1/4" (6 mm) x 48" (1219 mm) Connecting Tubes
9.	<b>0318117</b>	HY-100-A-1	Metal Push Button Assembly
10.	‡	V-500-AA	1-1/2" (38 mm) Vacuum Breaker Assembly RB (Model 152)
11.	‡	V-500-AA	3/4" (19 mm) Vacuum Breaker Assembly RB (Model 192)
12A.	<b>0306088</b>	F-2-AT	1-1/2" (38 mm) Slip Joint Coupling Assembly RB (Model 152)
12B.	<b>0306054</b>	F-2-AW	3/4" (19 mm) Slip Joint Coupling Assembly RB (Model 192)
13A.	‡	F-110	1-1/4" (32 mm) Outlet Tube with Flange and Scoring (Model 152)
13B.	‡	F-100	1-1/2" (38 mm) Outlet Tube with Flange and Scoring (Model 152)
14A.	<b>0306059</b>	F-2-AU	1-1/4" (32 mm) Slip Joint Coupling Assembly RB (Model 152)
14B.	<b>0306088</b>	F-2-AT	1-1/2" (38 mm) Slip Joint Coupling Assembly RB (Model 152)
15.	<b>0306091</b>	F-2-A	1-1/2" (38 mm) Coupling with S-21 Gasket (Model 152)
16.	<b>0206146PK</b>	F-21	1-1/2" (38 mm) Double Male Slip Joint Elbow
17.	‡	F-15-A	ELL with 3/4" (19 mm) Tail
18.	<b>0306054</b>	F-2-AW	3/4" (19 mm) Slip Joint Coupling
18A.	<b>SEE SLIP JOINT GASKETS AND RINGS TABLE BELOW</b>		
19.	<b>0305190</b>	EL-190-A	Handle Adapter Assembly
20.	<b>3345020</b>	EL-1033-A	ESS to TMO Retrofit Kit (Concealed)*
	<b>3388015</b>	H-1015-A	Flow Control Kit (HEU Only) (not Shown)

‡ Part number varies with valve model variation; consult factory.

\* Not Shown

### ITEM 18A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	<b>5306058</b>	F-3	Red Friction Ring
	<b>5322001</b>	VBF-5	Black Slip Joint Gasket
	<b>0319086/5319086</b>	S-30	Flexible Seat
	<b>0319079</b>	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	<b>0396062</b>	F-105	Slip Joint Gasket – Rigid
1-1/4"	<b>5306057</b>	F-3	Red Friction Ring
	<b>5322176</b>	VBF-5	Black Slip Joint Gasket
	<b>0307052/5307052</b>	G-21	Rigid Seat (rubber over brass)
1"	<b>5306056</b>	F-3	Red Friction Ring
	<b>5306115</b>	F-5	Black Slip Joint Gasket
3/4"	<b>5306055</b>	F-3	Red Friction Ring
	<b>5306113</b>	F-5	Black Slip Joint Gasket