

API710 Series Bottom Loading Coupler

The API700 Series of couplers is the third generation of Liquip-manufactured API couplers, it provides an effortless automatic connection for a safe and environmentally friendly transfer of product from the loading rack to the truck.

Key Features

- Unique stainless-steel outer collar and new latching-mechanism geometry greatly improve service life of coupler
- Automatic-latching mechanism and one-touch disconnect ensures effortless operation at all times
- Hard-anodized aluminum body for extended life
- Precision-machined latch spindles ensure superior latch alignment resulting in fewer drips at disconnection
- Nose seal and inner-poppet seals are two separate seals; therefore, high pressure will not extrude inner seal
- Ergonomic loop-and-ball handle for ease of operation and comfort
- Poppet nose seal is replaceable without removing coupler from service
- Coupler can be disassembled in 2-3 minutes for maintenance
- Viton® B70 seals are fitted as standard, Viton® GFLT seals in stock. Seal materials to suit a range of other applications available upon request



Dismantle

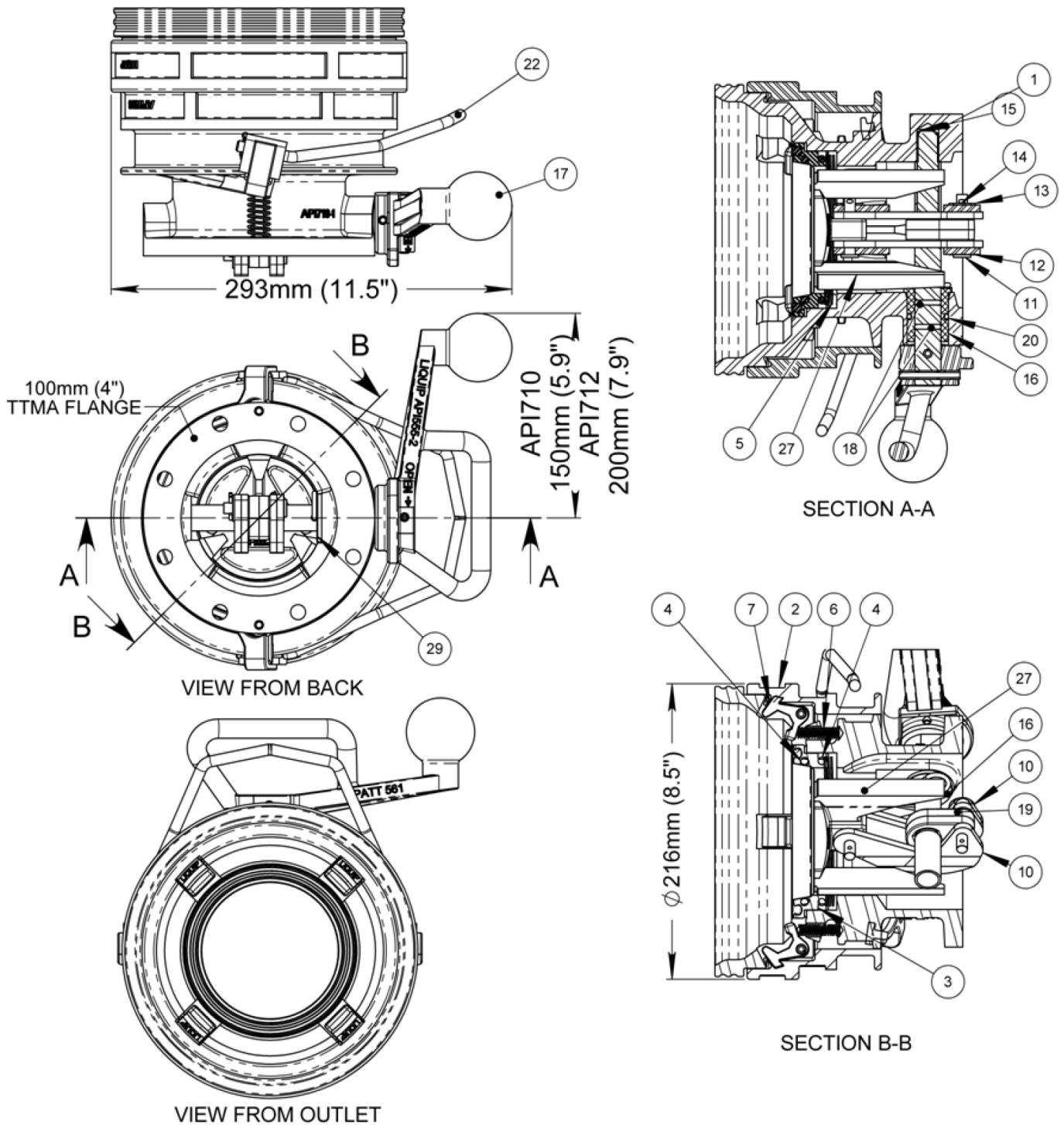
Easiest of all couplers to dismantle. Removal of one “R” clip enables the shaft assembly and main poppet to be withdrawn.

Specifications

Technical Data	<ul style="list-style-type: none"> • API710 has 150mm-long handle, API712 has 200mm-long handle • API710VG & API712VG have Viton® GFLT seals – recommended for ethanol blends
Test Pressure	1500kPa (218psi) (15bar) uncoupled
Operating Pressure	1000kPa (145psi) (10bar)
Max Coupling/Uncoupling Pressure	550kPa (80psi) (5.5bar)
Max Coupled Pressure	2000kPa (290psi) (20bar)
Operating Temperature	-20°C to 80°C (-4°F to 176°F) for Viton® B70 seals -40°C to 60°C (-40°F to 140°F) for Viton® GFLT seals
Associated Equipment	Liquip ‘Velvet Touch’ Loading Arms
Adjustment	None Required
Mounting	<ul style="list-style-type: none"> • By industry standard 100mm (4") TTMA Flange • 8 holes Ø11mm on 149mm PCD, 168mm outside diameter (Ø7/16" on 5.8" PCD, 6.6" OD) • Use spring washers when mounting coupler as per common industry practice
Weight	9.2kg (20.3lb)

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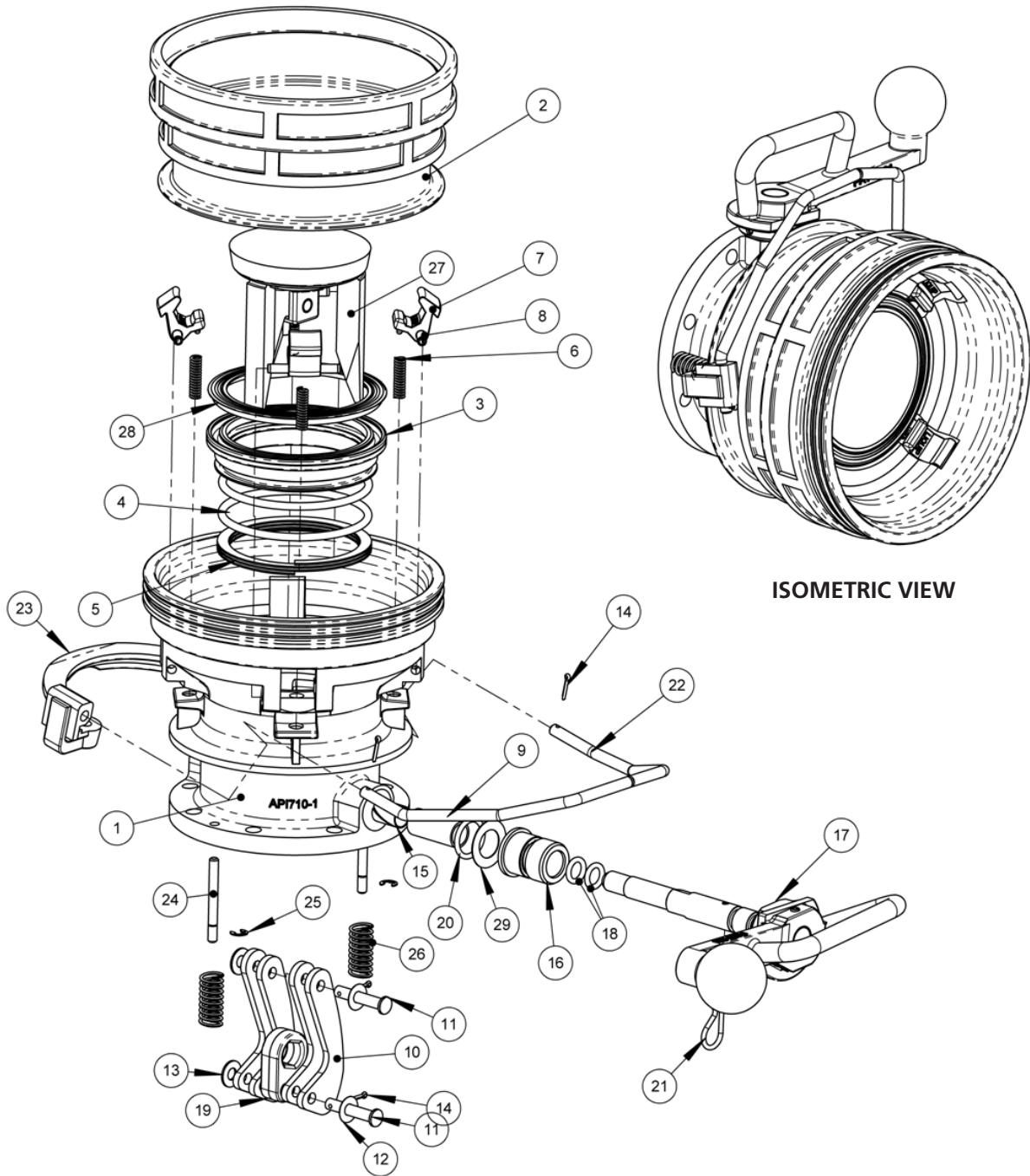
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ITEM	PART No.	DESCRIPTION	API710	API712	API710VG	API712VG	MATERIAL
1	API710-1	Body API710 Coupler	1	1	1	1	Aluminum
2	API700-3	Outer Body (Collar)	1	1	1	1	St Steel
3	API710-11	Poppet Adaptor Ring	1	1	1	1	Aluminum
4	0203	O-ring	2	2	-	-	Viton® B70
4	0203VG	O-ring	-	-	2	2	Viton® GFLT
5	4449	Spring Spirawave	1	1	1	1	Spring Steel
6	6171	Spring Compression	4	4	4	4	St Steel
7	API725-4	Latch Collar Interlock	4	4	4	4	St Steel
8	0927	Spring (Sellok) Pin	4	4	4	4	Z/P Steel
9	API555-9	Spacer Tube to Suit 4"	1	1	1	1	St Steel
10	API700-15	Camplate	4	4	4	4	Bisplate® 80
11	6736	Clevis Pin	2	2	2	2	Steel
12	5351	Washer Flat Thin	2	2	2	2	St Steel
13	0101	Washer Flat	2	2	2	2	Z/P Steel
14	0762	Split Cotter Pin	4	4	4	4	St Steel
15	2698	Tetratape® Bearing to Suit	1	1	1	1	Teflon®
16	API513-6	Bush Bearing	1	1	1	1	Acetal
17	API555-2	Operating Handle - Standard	1	-	1	-	Aluminum
17	API700-2	Handle/Shaft Sub-Assy - Long Style	-	1	-	1	Aluminum
18	0235	O-ring	2	2	-	-	Viton® B70
18	0235VG	O-ring (BS206)	-	-	2	2	Viton® GFLT
19	API513-7	Cam Eccentric	1	1	1	1	St Steel
20	4574VG	O-ring	1	1	1	1	Viton® GFLT
21	0945	R-Clip to Suit API450 Series	1	1	1	1	St Steel
22	API555-6	Handle - Outer Body Ring	1	1	1	1	St Steel
23	API555-10	Lever Outer Body	1	1	1	1	Aluminum
24	API555-7	Pin - Spring Return	2	2	2	2	St Steel
25	0093	E-Clip Imperial	2	2	2	2	St Steel
26	4497	Spring - Return	2	2	2	2	Spring Steel
27	API555-5H	Poppet to Suit 4"	1	1	1	1	Aluminum
28	4602VB	Seal Product	1	1	-	-	Viton® B70
29	5352	Shim Washer	1	1	1	1	St Steel
30	7476	Instructions	-	1	1	1	Paper
31	7486	Data Sheet	-	1	1	1	Paper
32	4602VG	Seal Product	-	-	1	1	Viton® GFLT

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ISOMETRIC VIEW

EXPLODED ISOMETRIC VIEW