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API71x SERIES DRY BREAK COUPLERS

P7486

DATA SHEET

**PART N°: API710 / E
API712 / E / VG**

- Title:** API bottom loading dry-break coupler with automatic latching.
- Operation:** Automatic push and latch operation with dry-break coupling and safety lock. Used for loading tank trucks.
- Features:** API71x series couplers are a major advance on previous designs, addressing well-known issues: -
- Advanced latching mechanism geometry for security and minimal wear.
 - Cast stainless steel collar for long operating life and to minimise operator damage.
 - Latch spindles are now precision machined and centred, not cast integrally.
 - Optional handle sizes, 150mm or 200mm swing, incorporates a ball-end for improved ergonomics and a carry-loop to ease the handling during parking.
- Dismantle:** Easiest of all couplers to dismantle. Simple, remove one "R" clip to enable shaft assembly and main poppet to be withdrawn.
- Adjustment Or Service:** None Required.
- Materials of Construction:** Aluminium bodies, hard anodised for wear resistance.
Cast stainless steel collar
High tensile steel shaft.
Super-tough die-cast and heat-treated stainless steel locking latches.
Viton seals throughout. EPDM available on request.
Replaceable bearings at both ends of shaft for support.
Coils springs replaced by wave washer.
- Mounting:** By Industry Standard 100mm (4") TTMA flange.
8 holes 11mm dia on 149mm PCD, 168 o/dia. (Ø7/16" on 5.8" PCD, 6.6" OD)
Use spring washers when mounting coupler.
- Weight:** 9.2kg (20.3lb)
- Technical Data:** API710 has 150mm long handle, API712 has 200mm long handle
API710E & API712E have EPDM seals for use with ethanol.
API712VG has Viton GFLT seals for increased chemical resistance.
Separate spindle on latch, with coil spring actuation, for improved smoothness and consistency.
Chamfered bore and moulded seal in nose for ease of coupling and drip-free operation.
Pressure-to-leak 2500kPa (363 PSI) uncoupled
Testing pressure 1500kPa (218 PSI) uncoupled.
Operating pressure 1000kPa (145 PSI)
Max coupling/uncoupling pressure 550kPa (80 PSI).
Max coupled pressure 2000kPa (290 PSI).
Min/Max operating temp -20° to +80°C (-4° to +176°F)
- Associated Equipment:** Liquip 'Velvet Touch' Loading Arms.

Overall dimensions shown on the drawing overleaf.

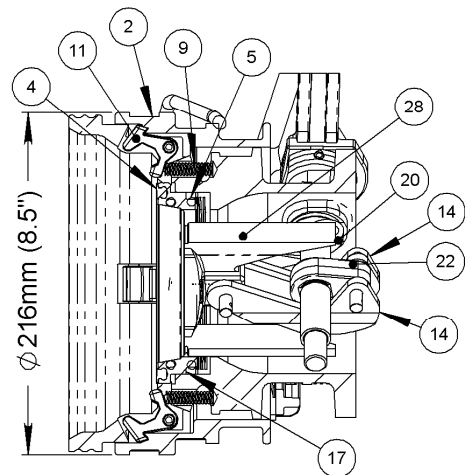
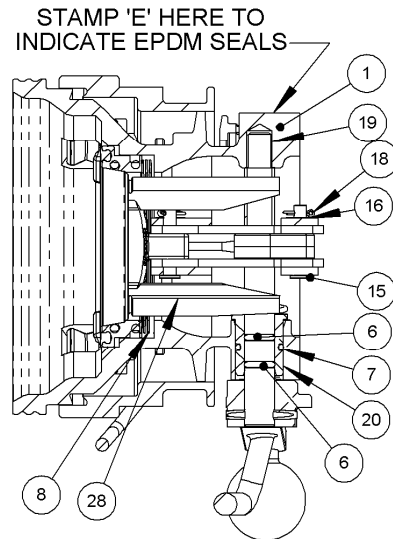
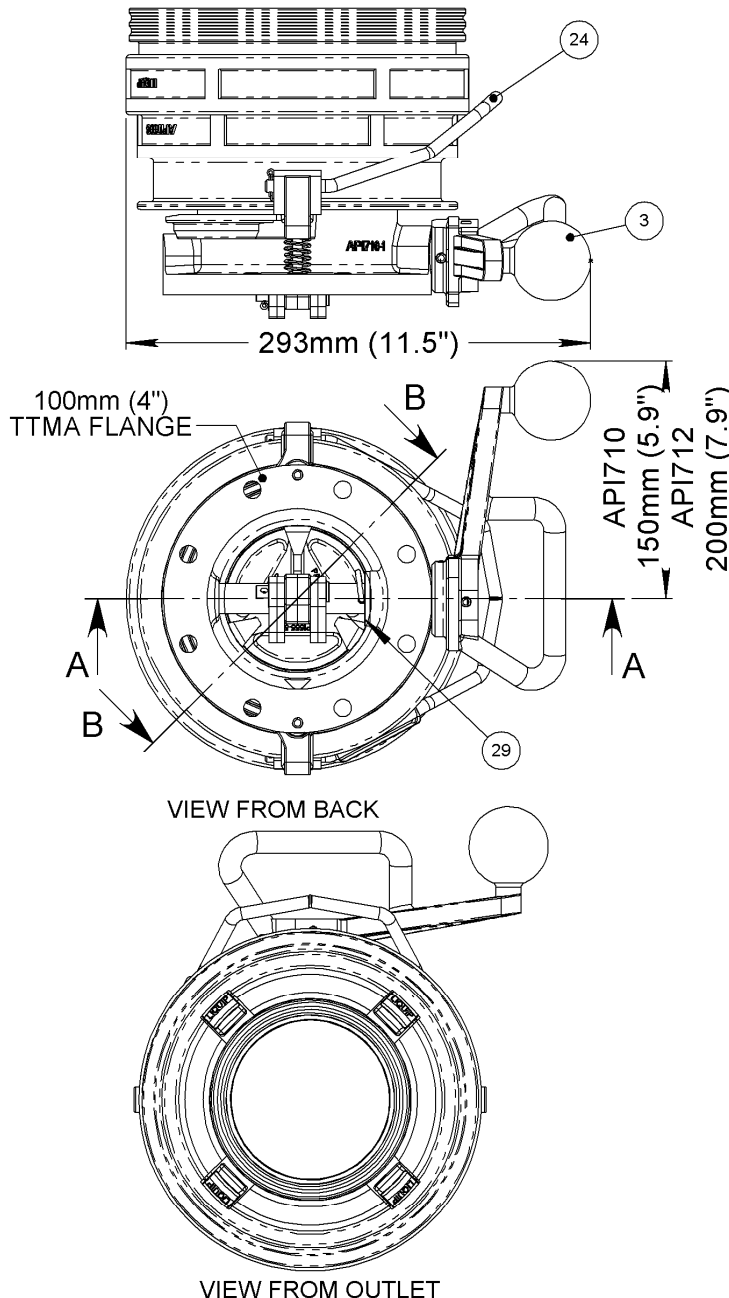


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LIQUIP

API71x Series Couplers



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 Issue: B
 Sheet 1 of 3

METERS - VALVES - VENTS - MANHOLES - PUMPS - HOSEREELS - OVERFILL PROTECTION - LOADING ARMS - ELECTRONIC DIPSTICKS



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ITEM NO.	PART NUMBER	DESCRIPTION	API710	API712	API710E	API712E	API712VG	MATERIAL
1	API710-1	BODY API710 COUPLER	1	1	1	1	1	ALUMINIUM
2	API700-3	OUTER BODY (COLLAR)	1	1	1	1	1	ST STEEL
3	API555-2	HANDLE OPERATING	1	-	1	-	1	CAST ALUMINIUM
3	API700-2	LONG STYLE HANDLE OPERATING	-	1	-	1	-	CAST ALUMINIUM
4	4602VB	SEAL PRODUCT	1	1	-	-	-	VITON
4	4602EPDM	SEAL PRODUCT	-	-	1	1	-	EPDM
4	4602VG	SEAL PRODUCT	-	-	-	-	1	VITON GFLT
5	0203	O-RING	2	2	-	-	-	VITON
5	0203EPDM	O-RING	-	-	2	2	-	EPDM
5	0203VG	O-RING	-	-	-	-	2	VITON GFLT
6	0235	O-RING	2	2	-	-	-	VITON
6	0235EPDM	O-RING	-	-	2	2	-	EPDM
6	0235VG	O-RING	-	-	-	-	2	VITON GFLT
7	4501	O-RING	1	1	1	1	-	NITRILE
7	4574VG	O-RING	-	-	-	-	1	VITON GFLT
8	4449	SPRING SPIRAWAVE	1	1	1	1	1	SPRING STEEL
9	6171	SPRING COMPRESSION	4	4	4	4	4	ST STEEL
10	4497	SPRING - RETURN	2	2	2	2	2	SPRING STEEL
11	API725-4	LATCH COLLAR INTERLOCK	4	4	4	4	4	ST STEEL
12	0927	SPRING PIN	4	4	4	4	4	STEEL
13	0926	SPRING PIN	2	2	2	2	2	STEEL
14	API700-15	CAMPLATE FOR API COUPLERS	4	4	4	4	4	BISPLATE 80
15	6736	PIN CLEVIS	2	2	2	2	2	STEEL
16	5351	WASHER FLAT THIN	2	2	2	2	2	ST STEEL
17	API710-11	POPPET ADAPTOR RING	1	1	1	1	1	ALUMINIUM
18	0762	SPLIT PIN	4	4	4	4	4	ST STEEL
19	2698	TETRATAPE BEARING TO SUIT	1	1	1	1	1	TEFLON
20	API513-6	BUSH BEARING	1	1	1	1	1	ACETAL
21	API555-8	OPERATING SHAFT TO SUIT	1	1	1	1	1	STEEL
22	API513-7	CAM ECCENTRIC	1	1	1	1	1	CAST ST STEEL
23	0945	R-CLIP TO SUIT API450 SERIES	1	1	1	1	1	ST STEEL
24	API555-6	HANDLE - OUTER BODY RING	1	1	1	1	1	ST STEEL
25	API555-10	LEVER OUTER BODY	1	1	1	1	1	CAST ALUMINIUM
26	API555-7	PIN - SPRING RETURN	2	2	2	2	2	ST STEEL
27	0093	E-CLIP IMPERIAL	2	2	2	2	2	ST STEEL
28	API555-5H	POPPET TO SUIT 4"	1	1	1	1	1	CAST ALUMINIUM
29	5352	SHIM WASHER	1	1	1	1	1	ST STEEL
30	API555-9	SPACER TUBE TO SUIT 4"	1	1	1	1	1	ST STEEL
31	6306	LABEL FOR HANDLE RELEASE	1	1	1	1	1	PLASTIC
32	7476	INSTRUCTIONS	1	1	1	1	1	PAPER
33	7486	DATASHEET	1	1	1	1	1	PAPER

NOTES:

1- API710E & API712E ARE IDENTICAL TO BASE MODELS EXCEPT WETTED COMPONENTS ARE EPDM AND USE 7128 SILICONE GREASE. STAMPED WITH 'E' WHERE INDICATED TO IDENTIFY.

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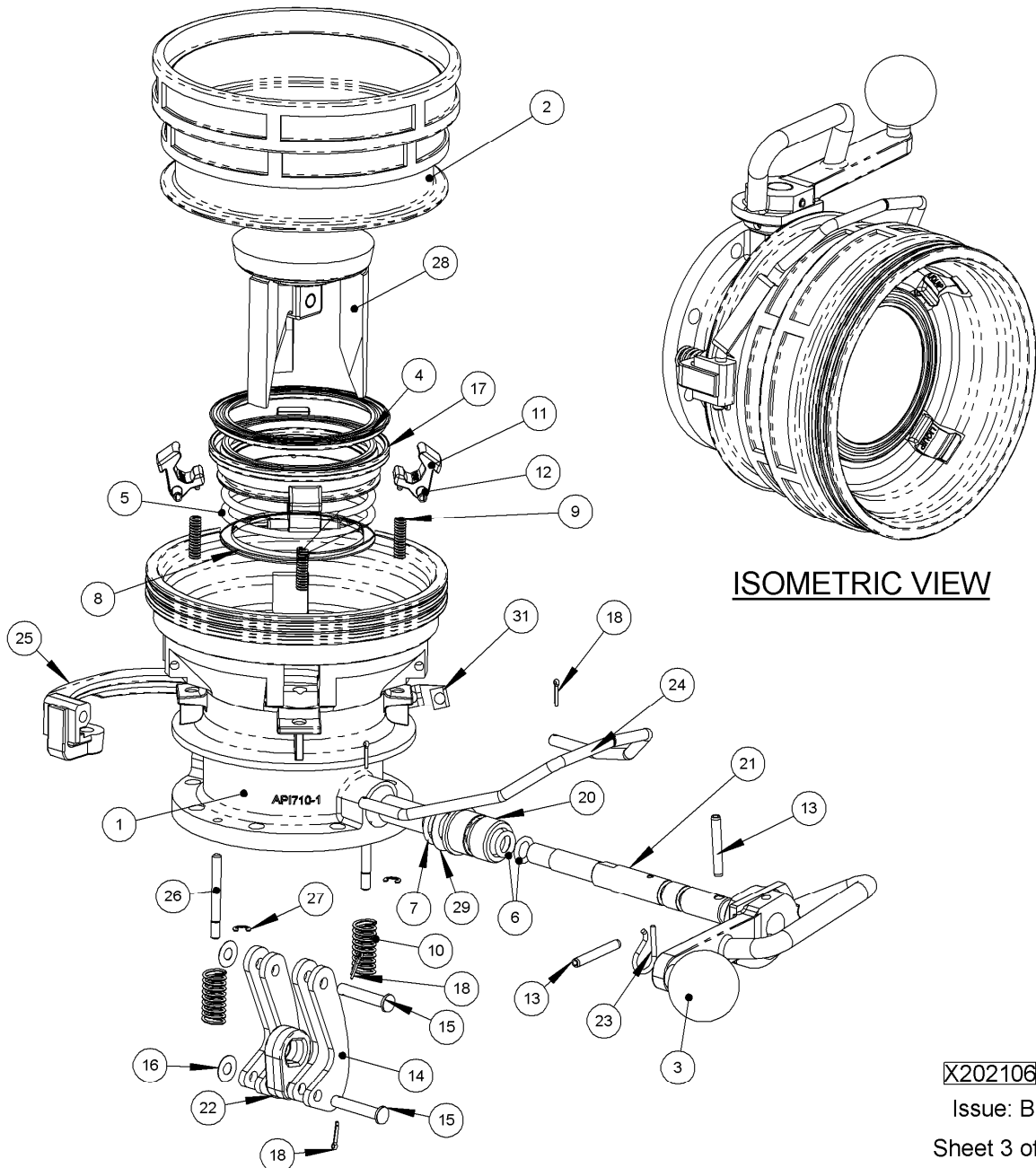


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