

LYNX SERIES SERIES BOTTOM LOADING COUPLER

The LYNX Series combines all of the best features of API couplers in one impressive device to provide a superior and effortless bottom loading experience.

Featuring stainless-steel components and coming in at 8.6kg (19 lbs), the LYNX Series coupler is impressive by any measure.

Count on LYNX for years of service and to help minimize fluid loss.

Fast Disassembly, Less Downtime

If you have 30 seconds and a screwdriver, you can disassemble LYNX. Thanks to a U-pin design, loading-arm operators can perform coupler maintenance without special tools and do it quickly.

Note: 5 year extended warranty is applicable to North America only.



LYNX852VG model shown

Key Features

Safety and Reliability

- Optimised design to bring your liquid terminals and tank trucks the very best in dry-break API technology.
- Minimal product leakage during disconnect increases site safety.
- Low risk of leakage because of a proven seal design.
- Four, "true interlocking" stainless steel latches ensure secure coupling and maximum safety.
- Lightweight without reducing safety and reliability.
- High-quality components including a stainless-steel collar and hard anodized aluminum body for increased service durability and life.
- Ultra-durable stainless-steel collar to its ability to protect your loading-arm connection even when facing surge pressures up to 3,400 kPa
- Proven seal design

Performance and Convenience

- Quick and easy disassembly of entire coupler through U-pin design.
- U-pin is secured when the TTMA flange is fastened to prevent the pin from coming out during service.
- Fast in-field replacement of main seals, on or off the arm.
- Two operating handle sizes to suit customer preference.
- Nominal product leakage during disconnect increases site safety.
- Collar designed to ensure minimal distortion of critical latching face.
- Easy to operate handle with a noticeable positive lock.
- A variety of seals available to suit a range of applications

Comfort and Style

- Automatic latching.
- Ergonomic operating handle and carry loop.
- Two operating handle sizes to suit customer preference.

Ordering Information

LYNX852 VG P

BODY

5 = Standard
6 = Drip Catcher

HANDLE

0 = Short Handle 150mm
2 = Long Handle 200mm

Example = LYNX852VG Long Handle, Viton™ GFLT.

VARIATIONS

P = Proximity sensor (only available in Viton™ B & GFLT seals).

SEALS

BLANK = Viton™ B.

VG = Viton™ GFLT.

C = FFKM.

G = AVGAS Selective (refer LYNX85xG drawing).

J = Jet Selective (refer LYNX85xJ drawing).

Q = Quad Seal (refer note on LYNX85x drawing).

Associated Equipment

- LBM800: Liquip Loading Arm Balance Assembly.
- LBV450VG: 4" Butterfly Valve, Viton™ GFLT seals.
- BF4-SG-25: 4" TTMA Sightglass flange, 25mm thick.
- BF4-SG-40: 4" TTMA Sightglass flange, 40mm thick.
- 0657V: 4" TTMA Viton™ Gasket.
- 4248: 4" TTMA Klinger Gasket

Technical Information

Technical info			
Handle Length	Short (150mm) or Long (200mm).	Mounting	By industry standard 100mm (4") TTMA Flange. 8 holes Ø7/16" on 5.8" PCD, 6.6" outside diameter (Ø11 mm on 149 mm PCD, 168 mm OD). Use spring washers when mounting coupler as per common industry practice.
Max Working Pressure:	80 psi (5.5 bar) (550 kPa).		
Product Test Pressure	119 psi (8.2 bar) (820 kPa).		
Design Pressure	363 psi (25 bar) (2,500 kPa).		
Max Surge Pressure:	493 psi (34 bar) (3,400 kPa).	Dismantling	Removal of one U-pin enables the shaft assembly and main poppet to be withdrawn.
Design Standard	- API RP 1004 8th EDITION 2003 - Bottom Loading and Vapor Recovery; AS5602-2009.		
Adjustment or Service	Refer to Maintenance Instructions document.	Weight	8.6kg (LYNX85x Couplers). 10.81kg (LYNX86x Couplers).

Seal Item No.	Seal Material	Seal Operating Temperature
API800-1	Viton™ B	-15°C to 90°C (0°F to 200°F)
API800-1VG	Viton™ GFLT (recommended for ethanol blends)	-28°C to 90°C (-20°F to 200°F)
API800-1C	FFKM (Kalrez)	-5°C to 80°C (-23°F to 176°F)
API800-1NBR	NBR (Nitrile/Buna)	-40°C to 100°C (-40°F to 212°F)
API800-1EPDM	EPDM (Peroxide cured)	-34°C to +149°C (-29°F to 300°F)
API800-1ULT	Tecnoflon - ultra low temperature	-40°C to +90°C (-40°F to + 200°F).

Common Spare Parts

The table below lists common spare parts for the LYNX series coupler.

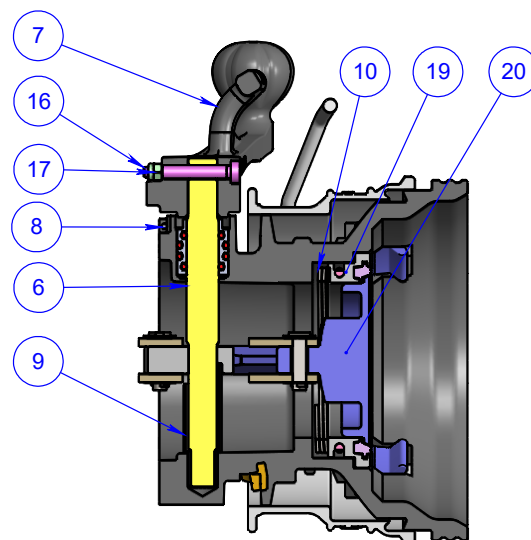
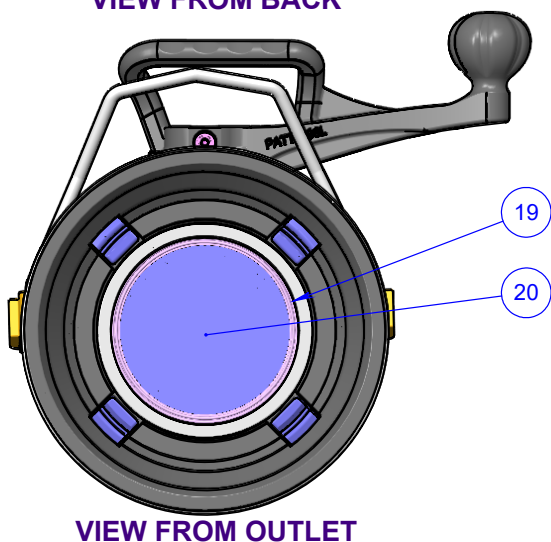
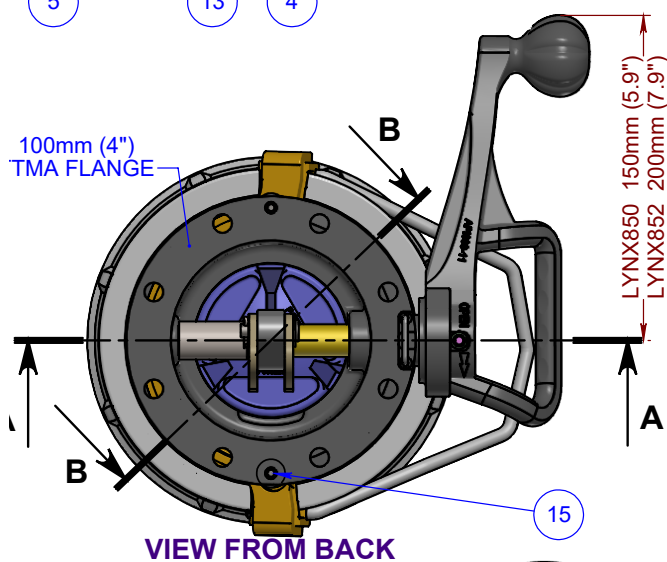
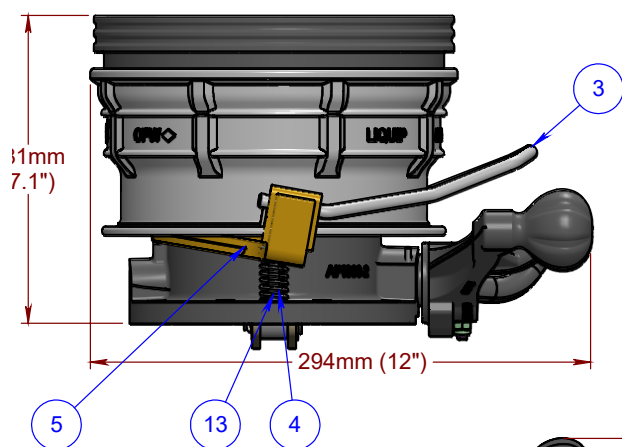
Part Number	Spare Part Description	Contents	Quantity required**
API850SK	LYNX850 All Seal Kit (Viton B)	1 x API800-1 Product Seal (Viton B) 1 x 0203 Outer O-ring (Viton B) 1 x 5805 Grease Kit 1 x API850-7A	1
API8KIT	LYNX Poppet Seal/O-ring Kit (Viton B)	1 x API800-1 Product Seal (Viton B) 1 x 0203 Outer O-ring (Viton B) 1 x 5805 Grease Kit	1
API850-7A	Bush and O-ring Assembly (Viton B)	1 x Bush and O-ring Assembly (Viton B) 1 x Nyloc Nut (4955) 1 x Shim Washer (API800-14)	1
API800-1	Product Seal (Viton B)	1 x Seal Product (Viton B)	1
0203	O-ring (Viton B)	1 x O-ring for Poppet Adaptor Ring (Viton B)	1
API850VGSK	LYNX All Seal Kit (Viton GFLT)	1 x API800-1VG Product Seal (Viton GFLT) 1 x 0203VG Outer O-ring (Viton GFLT) 1 x 5805 Grease Kit 1 x API850-7AVG	1
API8VGKIT	LYNX Poppet Seal/O-ring Kit (Viton GFLT)	1 x API800-1VG Product Seal (Viton GFLT) 1 x 0203VG Outer O-ring (Viton GFLT) 1 x 5805 Grease Kit	1
API850-7AVG	Bush and O-ring Assembly (Viton GFLT)	1 x Bush and O-ring Assembly (Viton GFLT) 1 x Nyloc Nut (4955) 1 x Shim Washer (API800-14)	1
API800-1VG	Product Seal (Viton GFLT)	1 x Seal Product (Viton GFLT)	1
0203VG	O-ring (Viton GFLT)	1 x O-ring for Poppet Adaptor Ring (Viton GFLT)	1
API850-7ANBR	Bush and O-ring Assembly (Nitrile/Buna)	1 x Bush and O-ring Assembly (Nitrile/Buna) 1 x M6 Nyloc Nut (4955) 1 x Shim Washer (API800-14)	1
API800-1NBR	Product Seal (Nitrile/Buna)	1 x Seal Product (Nitrile/Buna)	1
0203NBR	O-ring (Nitrile/Buna)	1 x O-ring - Poppet Adaptor Ring (Nitrile/Buna)	1
API800-1ULT	Product Seal (FKM ULT)	1 x Seal Product (FKM ULT)	1
0203ULT	O-ring (FKM ULT)	1 x O-ring - Poppet Adaptor Ring (FKM ULT)	1
API850CSKZ	LYNX All Seal Kit (FFKM)	1 x API800-1K Product Seal (FFKM) 1 x 0203K Outer O-ring (FFKM) 1 x API850-7AC (Bush and O-ring Assembly FFKM) 1 x 5805 Grease Kit	1
API850-7AC	Bush and O-ring Assembly (FFKM)	1 x Bush and O-ring Assembly (FFKM) 1 x M6 Nyloc Nut (4955) 1 x Shim Washer (API800-14)	1
API800-1K	Product Seal (FFKM)	1 x Seal Product (FFKM)	1
0203K	O-ring (FFKM)	1 x O-ring for Poppet Adaptor Ring (FFKM)	1
API800-23	U-pin	1 x U-pin Assembly	1
6182	Wave Spring	1 x Wave Spring	1
0762	Split Pin	1 x Split Pin	4
API725-4Z	Latch Collar Interlock Kit	4 x Latch Collar Interlock 4 x Latch Spring 4 x Latch Pin	1
0927	Spring Pin (Roll Pin) for Latches	1 x Spring Pin (Roll Pin) for Latches	4

* Product wetted components have been chosen for increased resistance to an wider range of fluids than other LYNX models. The materials used in the "C" versions are listed on the LYNX datasheet. Final product suitability is the responsibility of the end user.

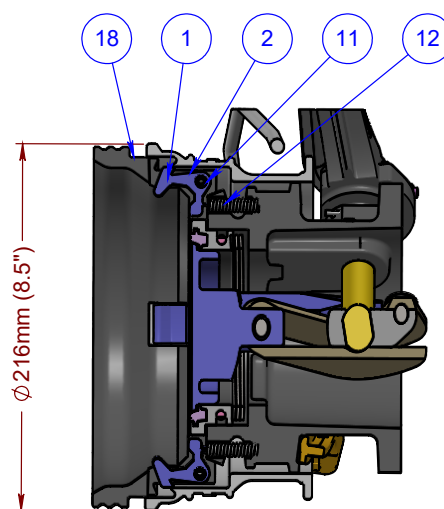
** Quantity required for applicable models.

Note: If you are unsure which seal to use contact Liquip.

LYNX85xxx SERIES COUPLERS



SECTION A-A



SECTION B-B

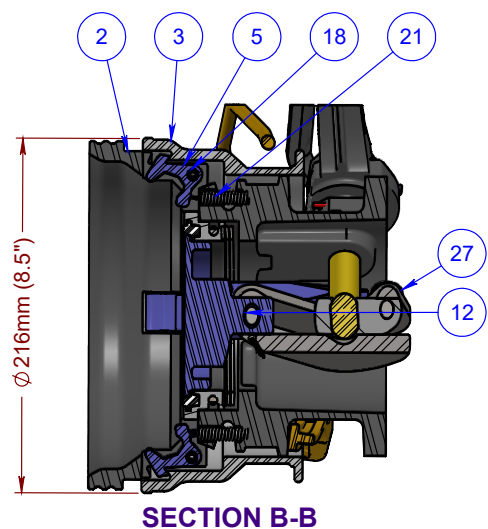
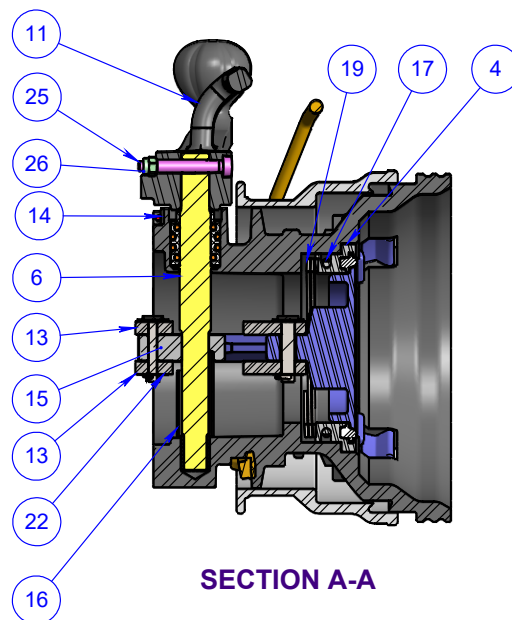
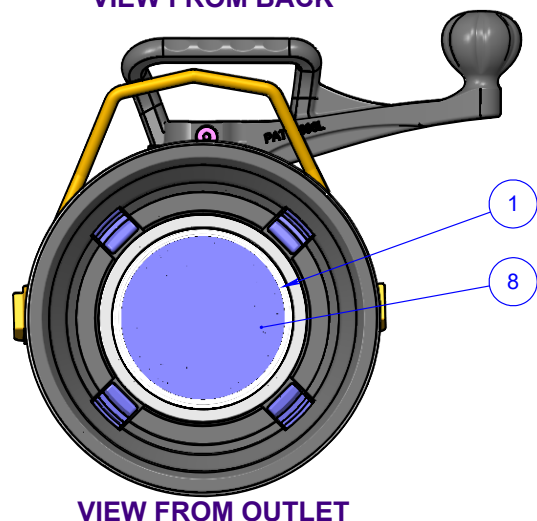
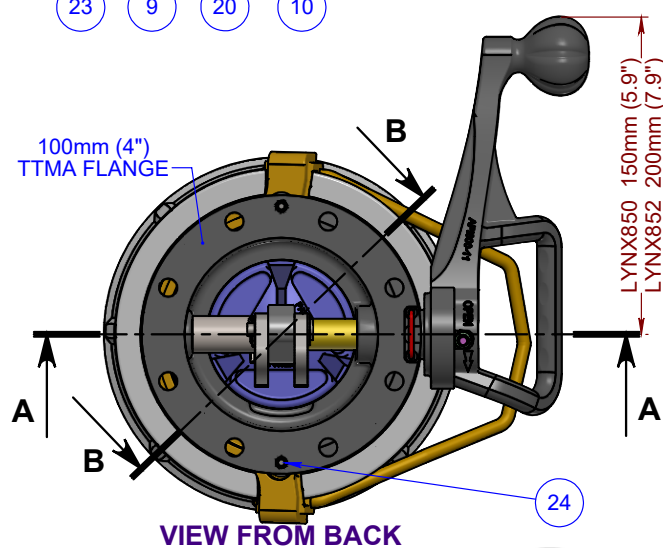
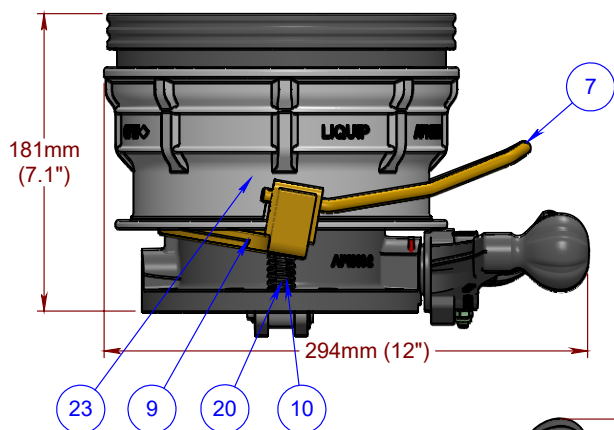
NOTE: LYNX852- LONG STYLE
OPERATING HANDLE SHOWN

LYNX85xxx SERIES COUPLERS

ITEM NO.	PART NUMBER	DESCRIPTION	LYNX850	LYNX852	LYNX850VG	LYNX852VG	MATERIAL
1	API800-3	OUTER BODY (COLLAR)	1	1	1	1	ST STEEL
2	API725-4	LATCH COLLAR INTERLOCK	4	4	4	4	ST STEEL
3	API555-6	HANDLE - OUTER BODY RING	1	1	1	1	ST STEEL
4	API800-13	PIN - SPRING RETURN	2	2	2	2	ST STEEL
5	API800-18	LEVER OUTER BODY	1	1	1	1	ALUMINIUM
6	API850-5A	SHAFT AND API850-7A BUSH ASSY	1	1	-	-	STEEL, VITON A & ACETAL
	API850-5AVG	SHAFT AND API850-7AVG BUSH ASSY	-	-	1	1	STEEL, VITON GFLT & ACETAL
7	API800-11	LONG STYLE HANDLE OPERATING	-	1	-	1	ALUMINIUM
	API800-15	SHORT STYLE HANDLE OPERATING	1	-	1	-	ALUMINIUM
8	API800-23	PIN U	1	1	1	1	SPRING STEEL
9	API800-28	SPACER SLEEVE	1	1	1	1	STAINLESS STEEL
10	6182	SPRING SPIRAWAVE	1	1	1	1	SPRING STEEL
11	0927	SPRING (SELLOK) PIN	4	4	4	4	Z/P STEEL
12	6171	SPRING COMPRESSION	4	4	4	4	ST STEEL
13	4497	SPRING - RETURN	2	2	2	2	SPRING STEEL
14	0762	SPLIT COTTER PIN	2	2	2	2	ST STEEL
15	3227	GRUBSCREW MET	2	2	2	2	BLK STEEL
16	55091	CAPSCREW SHOULDER METRIC	1	1	1	1	STEEL PHOSPHATED
17	4399	NUT NYLOC	1	1	1	1	Z/P STEEL
18	API800-2	BODY API800 SERIES COUPLER	1	1	1	1	ALUMINIUM
19	API800-4-ASSY	RING ADAPTER ASSEMBLY	1	1	-	-	ALUMINIUM, VITON
	API800-4VG-ASSY	RING ADAPTER ASSEMBLY	-	-	1	1	ALUMINIUM, VITON GFLT
20	API800-9-ASSY	POPPET ASSEMBLY	1	1	1	1	STEEL PHOSPHATED, ALUMINIUM, ST STEEL

Note: For LYNX85xQ the 0203 is replaced with a Viton A quad seal variant. (0203-Q)

LYNX85xC SERIES CHEMICAL COUPLERS



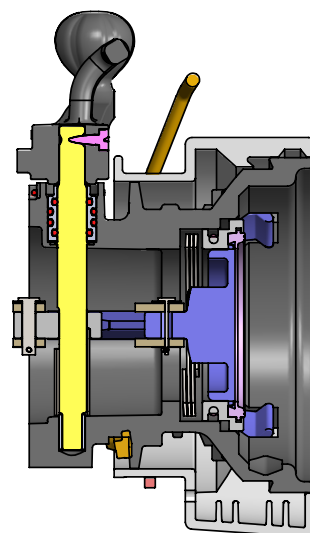
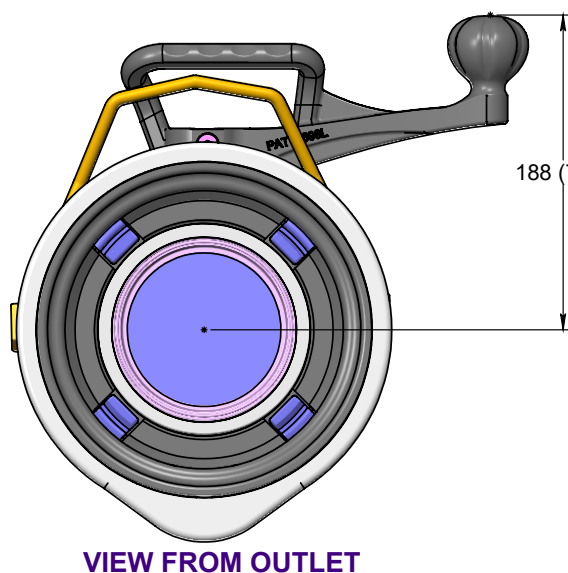
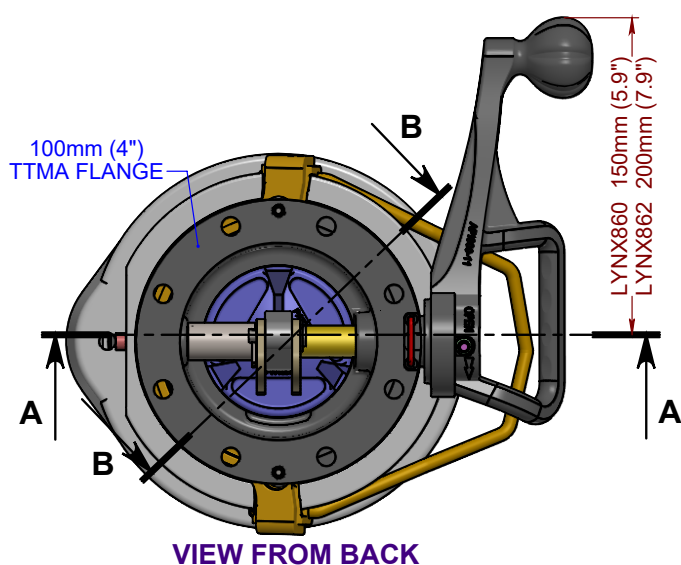
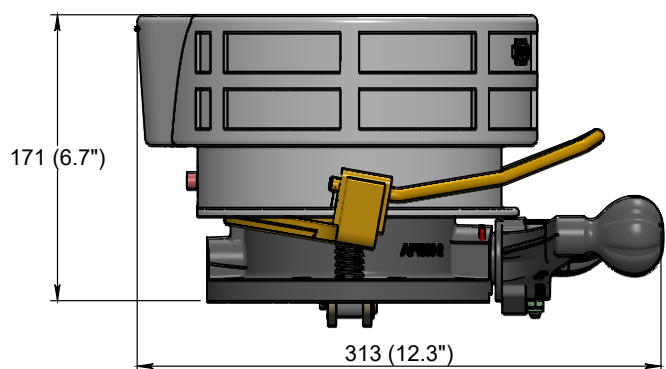
NOTE: LYNX852- LONG STYLE
OPERATING HANDLE SHOWN

Visit website for exploded view and video.

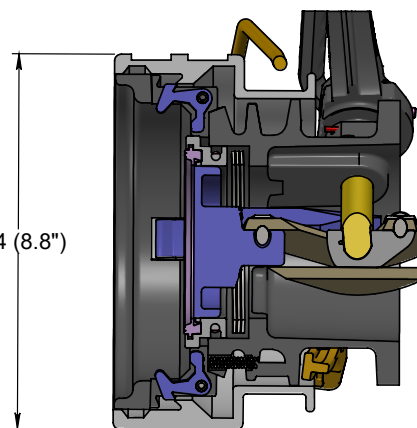
LYNX85xC SERIES CHEMICAL COUPLERS

ITEM NO.	PART NUMBER	DESCRIPTION	LYNX850C	LYNX852C	MATERIAL
1	API800-1K	SEAL PRODUCT	1	1	FFKM
2	API800-2	BODY API800 SERIES COUPLER	1	1	ALUMINIUM
3	API800-3	OUTER BODY (COLLAR)	1	1	ST STEEL
4	API800-4	POPPET ADAPTOR RING	1	1	ALUMINIUM
5	API725-4	LATCH COLLAR INTERLOCK	4	4	ST STEEL
6	API850-5AC	SHAFT AND API850-7AC BUSH ASSY	1	1	SS, FFKM & PTFE
7	API555-6	HANDLE - OUTER BODY RING	1	1	ST STEEL
8	API800-9	POPPET 4"	1	1	ALUMINIUM
9	API800-18	LEVER OUTER BODY	1	1	ALUMINIUM
10	API800-13	PIN - SPRING RETURN	2	2	ST STEEL
11	API800-11	LONG STYLE HANDLE OPERATING	-	1	ALUMINIUM
	API800-15	SHORT STYLE HANDLE OPERATING	1	-	ALUMINIUM
12	API800-19	PIN CLEVIS (FOR API COUPLER-CHEMICAL)	2	2	STAINLESS STEEL
13	API800-20	CAMPLATE FOR API CHEMICAL COUPLERS	2	2	304
14	API800-23	PIN U	1	1	SPRING STEEL
15	API800-27	CAM ECCENTRIC WITH SLEEVE CUTOUTS	1	1	ST STEEL
16	API800-28	SPACER SLEEVE	1	1	STAINLESS STEEL
17	0203K	O-RING	1	1	FFKM
18	0927	SPRING (SELLOK) PIN	4	4	Z/P STEEL
19	6182	SPRING SPIRAWAVE	1	1	SPRING STEEL
20	4497	SPRING - RETURN	2	2	SPRING STEEL
21	6171	SPRING COMPRESSION	4	4	ST STEEL
22	5351	WASHER FLAT THIN	2	2	ST STEEL
23	0762	SPLIT COTTER PIN	4	4	ST STEEL
24	3227	GRUBSCREW MET	2	2	BLK STEEL
25	55091	CAPSCREW SHOULDER METRIC	1	1	STEEL PHOSPHATED
26	4399	NUT NYLOC	1	1	Z/P STEEL
27	0101	WASHER FLAT	2	2	Z/P STEEL

LYNX86xxx SERIES COUPLERS



SECTION A-A



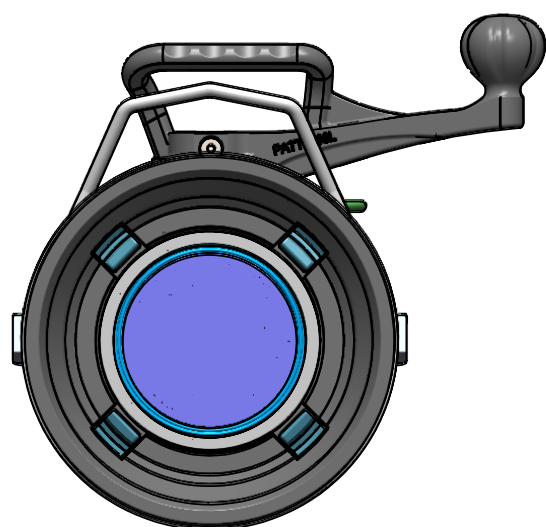
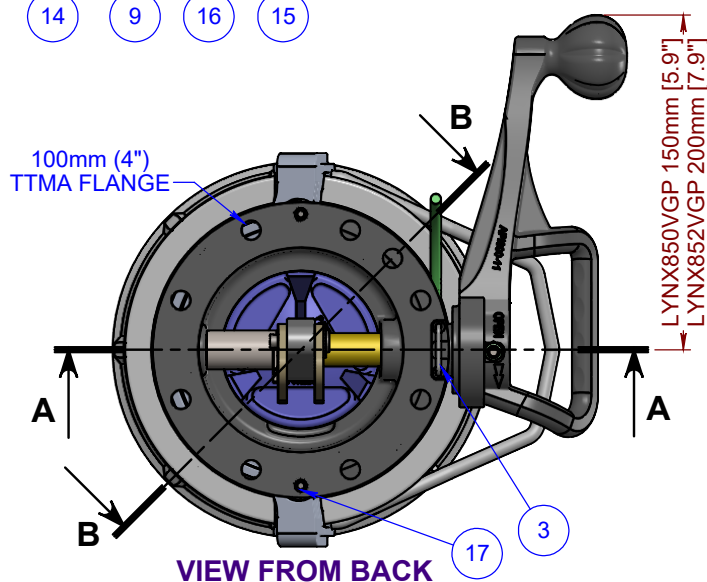
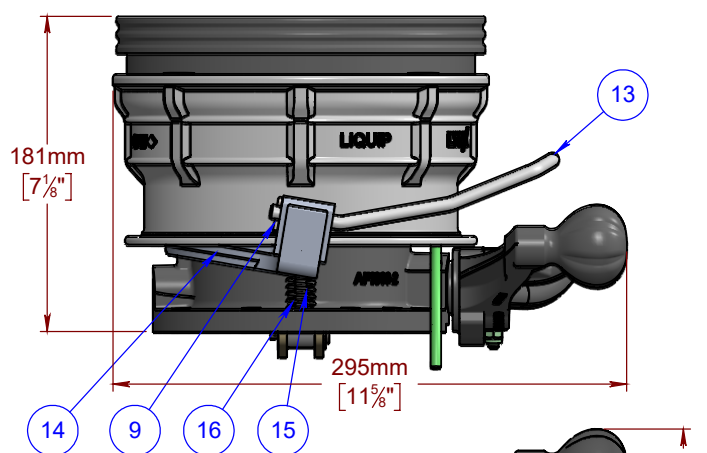
SECTION B-B

NOTE: LYNX862 - LONG STYLE
OPERATING HANDLE SHOWN

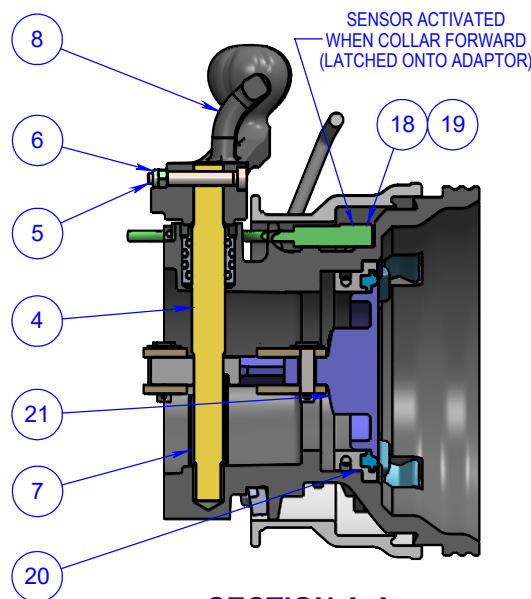
LYNX86xxx SERIES COUPLERS

ITEM	PART NUMBER	DESCRIPTION	LYNX860	LYNX862	LYNX860VG	LYNX862VG	MATERIAL
1	API820-2	BODY API800 SERIES COUPLER	1	1	1	1	ALUMINIUM
2	API725-3	COLLAR FOR API COUPLER	1	1	1	1	ST STEEL
3	API725-4	LATCH COLLAR INTERLOCK	4	4	4	4	ST STEEL
4	API555-6	HANDLE - OUTER BODY RING	1	1	1	1	ST STEEL
5	API800-13	PIN - SPRING RETURN	2	2	2	2	ST STEEL
6	API800-11	LONG STYLE HANDLE OPERATING	-	1	-	1	ALUMINIUM
	API800-15	SHORT STYLE HANDLE OPERATING	1	-	1	-	ALUMINIUM
7	API850-5A	SHAFT AND API850-7A BUSH ASSY	1	1	-	-	STEEL, VITON A & ACETAL
	API850-5AVG	SHAFT AND API850-7AVG BUSH ASSY	-	-	1	1	STEEL, VITON GFLT & ACETAL
8	API800-18	LEVER OUTER BODY	1	1	1	1	ALUMINIUM
9	API800-23	PIN U	1	1	1	1	SPRING STEEL
10	API800-28	SPACER SLEEVE	1	1	1	1	ST STEEL
11	55091	CAPSCREW SHOULDER METRIC	1	1	1	1	STEEL PHOSPHATED
12	0927	SPRING (SELLOK) PIN	4	4	4	4	Z/P STEEL
13	4497	SPRING - RETURN	2	2	2	2	SPRING STEEL
14	6171	SPRING COMPRESSION	4	4	4	4	ST STEEL
15	6182	SPRING SPIRAWAVE	1	1	1	1	SPRING STEEL
16	0762	SPLIT COTTER PIN	2	2	2	2	ST STEEL
17	3227	GRUBSCREW MET	2	2	2	2	BLK STEEL
18	6737	CAPSCREW METRIC	1	1	1	1	ST STEEL
19	4399	NUT NYLOC	1	1	1	1	Z/P STEEL
20	API800-4-ASSY	RING ADAPTER ASSEMBLY	1	1	-	-	ALUMINIUM, VITON
	API800-4VG-ASSY	RING ADAPTER ASSEMBLY	-	-	1	1	ALUMINIUM, VITON GFLT
21	API800-9-ASSY	POPPET ASSEMBLY	1	1	1	1	STEEL PHOSPHATED, ALUMINIUM, ST STEEL

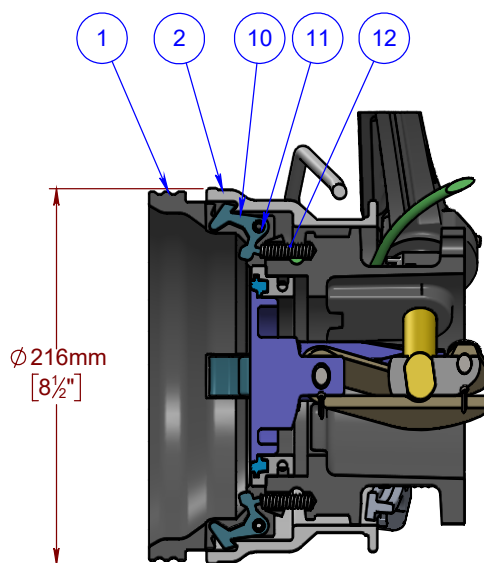
LYNX85xVGP SERIES COUPLERS



VIEW FROM OUTLET



SECTION A-A



SECTION B-B

NOTE: LYNX852VGP LONG STYLE
OPERATING HANDLE SHOWN

LYNX85xVGP SERIES COUPLERS

ITEM NO.	PART NUMBER	DESCRIPTION	LYNX850VGP	LYNX852VGP	MATERIAL
1	API800-2P	BODY API800 SERIES COUPLER	1	1	USE API800-2 BODY
2	API800-3	OUTER BODY (COLLAR)	1	1	ST STEEL
3	API800-23	PIN U	1	1	SPRING STEEL
4	API850-5AVG	SHAFT AND API850-7AVG BUSH ASSY	1	1	STEEL, VITON GFLT & ACETAL
5	55091	CAPSCREW SHOULDER METRIC	1	1	STEEL PHOSPHATED
6	4399	NUT NYLOC	1	1	Z/P STEEL
7	API800-28	SPACER SLEEVE	1	1	STAINLESS STEEL
8	API800-15	SHORT STYLE HANDLE OPERATING	1	-	ALUMINIUM
	API800-11	LONG STYLE HANDLE OPERATING	-	1	ALUMINIUM
9	0762	SPLIT COTTER PIN	2	2	ST STEEL
10	API725-4	LATCH COLLAR INTERLOCK	4	4	ST STEEL
11	0927	SPRING (SELLOK) PIN	4	4	Z/P STEEL
12	6171	SPRING COMPRESSION	4	4	ST STEEL
13	API555-6	HANDLE - OUTER BODY RING	1	1	ST STEEL
14	API800-18	LEVER OUTER BODY	1	1	ALUMINIUM
15	API800-13	PIN - SPRING RETURN	2	2	ST STEEL
16	4497	SPRING - RETURN	2	2	SPRING STEEL
17	3227	GRUBSCREW MET	2	2	BLK STEEL
18	API850-6	PROXIMITY SENSOR	1	1	ELECTRONIC
19	6516	SCREW MET C/SUNK PH	2	2	ST STEEL
20	API800-4VG-ASSY	RING ADAPTER ASSEMBLY	1	1	ALUMINIUM, VITON GFLT
21	API800-9-ASSY	POPPET ASSEMBLY	1	1	STEEL PHOSPHATED, ALUMINIUM, ST STEEL