

Instructions—Parts List



HIGH PRESSURE FLUID LINE

Ball Valves, Check Valves, and Swivels

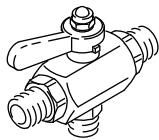
306861ZAD

EN

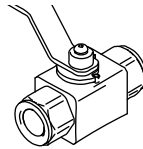


Important Safety Instructions

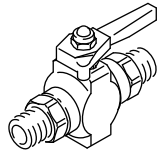
Read all warnings and instructions in this manual.
Save these instructions. See page 3 for a **List of Models**, including **Maximum Working Pressures**.



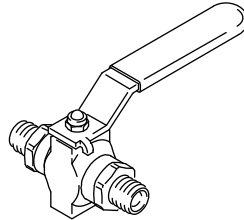
Model 214711



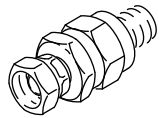
Model 262739



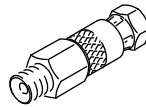
Model 210657, 26A068, 26A078



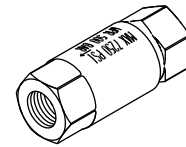
Model 238635



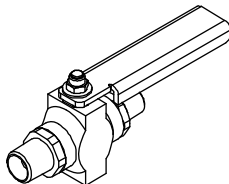
Model 206831



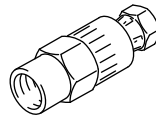
Model 239663



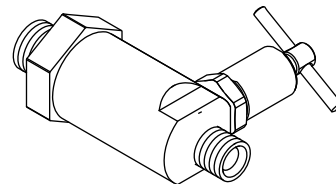
Model 16T481, 24S039



Model 239280



Model 214925



Model 25C189, 127631

Table of Contents

Table of Contents	2
List of Models	2
Symbols	5
Ball Valve Operation/Service	6
Two Way Valve Parts	7
One Way Valve Parts	7
Check Valve Parts	17
Swivel Parts	19
Graco Standard Warranty	20
Graco Information	20

List of Models

Two Way Director Valve

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
214711	A	1/4 npt(mbe)	fluoroelastomer

One Way Ball Valves

7400 psi (51 MPa, 510 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
237303	A	1/4 npt(mbe)	PTFE with PEEK seat
237304	A	3/8 npt(mbe)	PTFE with PEEK seat
245860	A	3/8 npt(mbe)	PTFE with PEEK seat
245861	A	3/8 npt(mbe)	PTFE with PEEK seat
248875	A	1/4 npt(mbe)	PTFE with PEEK seat
248876	A	3/8 npt(mbe)	PTFE with PEEK seat

One Way Ball Valves, Heavy Duty, Stainless Steel

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
262739	A	1/2 npt(fbe)	PTFE with PEEK seat
262740	A	1/2 npt(fbe)	PTFE with PEEK seat

One Way Ball Valves, Heavy Duty

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
235573	B	3/8 npt(m) one end	fluoroelastomer with Carbide seat
237469	A	3/8 npt(m) x 1/4 npt(m)	fluoroelastomer with Carbide seat
238967	C	3/8 npt(m) x 3/8 npt(m)	PTFE with PEEK seat
239280	A	1/4 npt(m) x 1/4 npt(m)	fluoroelastomer with Carbide seat

List of Models

One Way Ball Valves

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
210657	B	1/4 npt(mbe)	fluoroelastomer
210658	B	3/8 npt(mbe)	fluoroelastomer
210659	B	3/8 x 1/4 npt(mbe)	fluoroelastomer
214037	B	1/4 npt(mbe)	PTFE
218901	A	1/4 nps(m) x 3/4 unf-2a	PTFE
223959	A	3/8 x 1/4 npt(mbe)	PTFE
223960	A	3/8 npt(mbe)	PTFE
224441	A	3/8 npt(m) one end	fluoroelastomer
235992	A	3/8 x 1/4 npt(mbe)	PTFE, sst
238612	A	3/8 npt(mbe)	fluoroelastomer
238635	A	1/4 npt(mbe)	fluoroelastomer
238694	A	3/8 npt(mbe)	PTFE, sst
239018	A	1/4 npt(mbe)	PTFE, sst
240410	A	3/8 npt(mbe)	PTFE, sst
240411	A	1/4 npt(mbe)	PTFE, sst
248271	A	1/4 npt(mbe)	PTFE, sst
24F607	A	3/8 npt(mbe)	Flouroelastomer
26A068	A	3/8 x 1/4npt(mbe)	PTFE, SST
26A078	A	1/4 npt(mbe)	PTFE, SST

List of Models

Swivels

7400 psi (51 MPa, 510 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
236987	B	1/4 npsm(f) x 1/4 npsm(m) swivel	PTFE

Swivels

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
214925	–	3/8 npt(f) x 1/4 npsm(f) swivel	Leather
214926	–	3/8 npt(f) x 1/2 npsm(f) swivel	Leather

Check Valves

3000 psi (21 MPa, 210 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
206831	–	3/8 npt(m) x 3/8 npsm(f) swivel	Nitrile rubber
206833	–	3/8 npt(m) x 3/8 npsm(f) 90° swivel	Nitrile rubber
206962	–	3/8 npt(mbe)	Nitrile rubber

Check Valves

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Ball/Seat	Housing
16T481	–	3/4 npt(f) x 3/4 npt(f)	SST/Carbide	Carbon Steel
24S039	–	3/4 npt(f) x 3/4 npt(f)	SST/Carbide	Stainless Steel
127631	B	3/4 npt(m) x 1/2 npt(m)	SST/Carbide	Carbon Steel
25C189	–	1/2 npt(m) x 1/2 npt(m)	SST/Carbide	Carbon Steel

Swivels

3600 psi (25 MPa, 250 bar) Maximum Working Pressure

Part No.	Series	Thread Size	Seals
239663	–	1/4 npt(m) x 1/4 npsm(f) swivel	Leather
223341	B	1/4 npt(m) x 1/4 npsm(f) swivel	PTFE

Symbols

Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

WARNING



EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are not sure, call your Graco distributor.
- Do not alter or modify this equipment.
- Check equipment daily. Repair or replace worn or damaged parts immediately. Do not repair highpressure couplings; you must replace the entire hose.
- Do not exceed the maximum working pressure of the lowest rated system component. Refer to the charts on pages 2 and NO TAG for the maximum working pressure of this equipment.
- Use fluids and solvents which are compatible with the equipment wetted parts. Refer to the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.



SKIN INJECTION HAZARD

Spray from the gun, leaks or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed in the eyes or on the skin can also cause serious injury.

- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate surgical treatment.**
- Keep hands away from the end of the drain valve when opening it.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Follow the **Pressure Relief Procedure** on page 6, before cleaning, checking or servicing the equipment.
- Tighten all fluid connections before operating the equipment.
- Fluid hoses must have spring guards on both ends, to help protect them from rupture caused by kinks or bends near the couplings.

Ball Valve Operation/Service

Pressure Relief Procedure

WARNING



SKIN INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

- are instructed to relieve the pressure,
- stop dispensing,
- check or service any of the system equipment,
- or install or clean dispensing devices.

1. Engage the spray gun safety latch and any other equipment safety locks.
2. Turn off the power to the pump.
3. Disengage the gun safety latch and trigger the spray gun to relieve pressure.
4. Engage the spray gun safety latch and slowly open the system drain valve(s). Keep hands away from the end of the drain valve when opening it.
5. Leave the drain valve(s) open until you are ready to use the system again.

WARNING

Two-way director valves must be used only as ON/OFF valves. Never use them to “throttle” fluid flow, as this causes rapid wear of the valve. A worn valve may leak or fail to stay in the position (open/drain) that you set it, unexpectedly allowing high pressure fluid into the closed off part of the system. This hazard can result in fluid injection or splashing in the eyes or on the skin.

If the valve leaks fluid into the closed off part of the system, or if the valve handle is loose or does not hold its position firmly, replace the valve immediately.

Two-Way Director Valve

The two-way director valve is used to direct high pressure fluids in either of two directions. It is commonly used in heated circulating systems to bleed trapped air and to direct unused, heated fluids back to the pump. It can also be used in multiple gun installations.

Connect the fluid line to the 1/4 in. npt(m) inlet (marked “IN”). Direct the fluid to either outlet by turning the lever in the direction desired for flow.

One-Way Valves

The one-way valves are used as drain valves to relieve fluid pressure in spray systems. To open the valve, turn the lever parallel to the valve housing. To fully stop fluid flow through the valve, turn the lever 90° to the valve housing.

Valve Service

Follow the **Pressure Relief Procedure** at left. Remove the valve from the line and disassemble it. Clean the parts and inspect them for wear or damage. Replace them as necessary.

CAUTION

Do not wash fluoroelastomer o-rings in ketone thinners as these thinners cause the o-rings to deteriorate.

Lubricate the o-ring seals and threaded parts with lithium base lubricant. Assemble the valve in the reverse order of disassembly (refer to the parts drawing for your model). When installing the lever on the valve, make sure the hole in the ball is aligned with the direction of the lever.

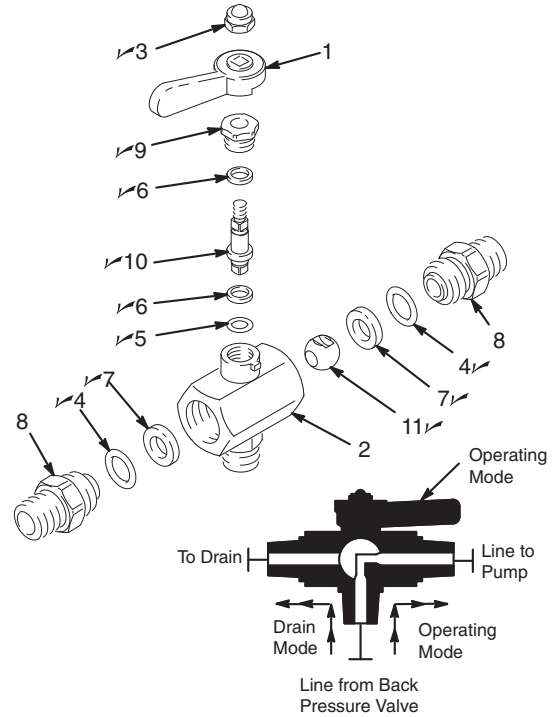
Two Way Valve Parts

Model 21471

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npt(mbe), fluoroelastomer seals

REF NO.	PART NO.	DESCRIPTION	QTY
1	206970	LEVER, valve	1
2	214710	HOUSING, valve	1
3✓	102310	NUT, hex; nylon cap; No. 10–32	1
4✓	110241	SEAL, o-ring; fluoroelastomer standard	2
	104892	SEAL, o-ring; PTFE optional	2
5✓	110242	SEAL, o-ring; fluoroelastomer standard	1
	104893	SEAL, o-ring; PTFE optional	1
6✓	164900	WASHER, flat, nylon	2
7✓	172094	SEAT, ball, nylon	2
8	165274	STUD, valve; 1/4 npt(m)	2
9✓	165964	NUT, packing	1
10✓	166696	STEM, valve	1
11✓	167008	BALL, valve	1

✓ Keep these spare parts on hand to reduce down time.



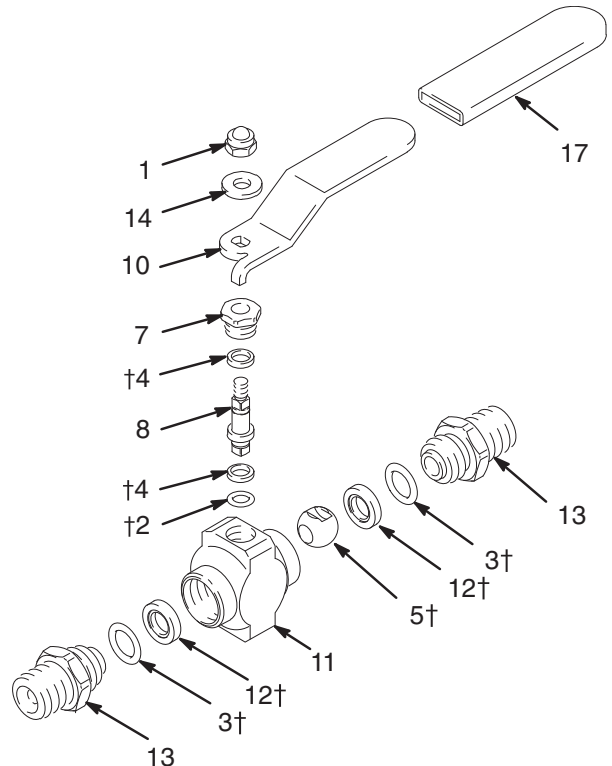
One Way Valve Parts

Model 238967, Series C

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(m) x 3/8 npt(m), PTFE seals, PEEK seat

REF NO.	PART NO.	DESCRIPTION	QTY
1	102310	NUT, hex; nylon cap; No. 10–32	1
2†	104893	SEAL, o-ring; PTFE	1
3†	104892	SEAL, o-ring; PTFE	2
4†	164900	WASHER, flat, nylon	2
5†	188745	BALL, valve	1
7	165964	NUT, packing	1
8	188742	STEM, valve	1
10	190180	LEVER, valve	1
11	188828	HOUSING, valve	1
12†	190179	SEAT, ball	2
13	188743	NIPPLE, 3/8 npt(m)	2
14	112776	WASHER, flat	1
17	112907	GRIP, handle	1

† These parts are included in Repair Kit 240147, which may be purchased separately.



One Way Valve Parts

Model 237303, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 1/4 npt(mbe); PTFE seals, PEEK seat

Model 237304, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat

Model 245860, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat

Model 245861, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat

Model 248875, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 1/4 npt(mbe); PTFE seals, PEEK seat

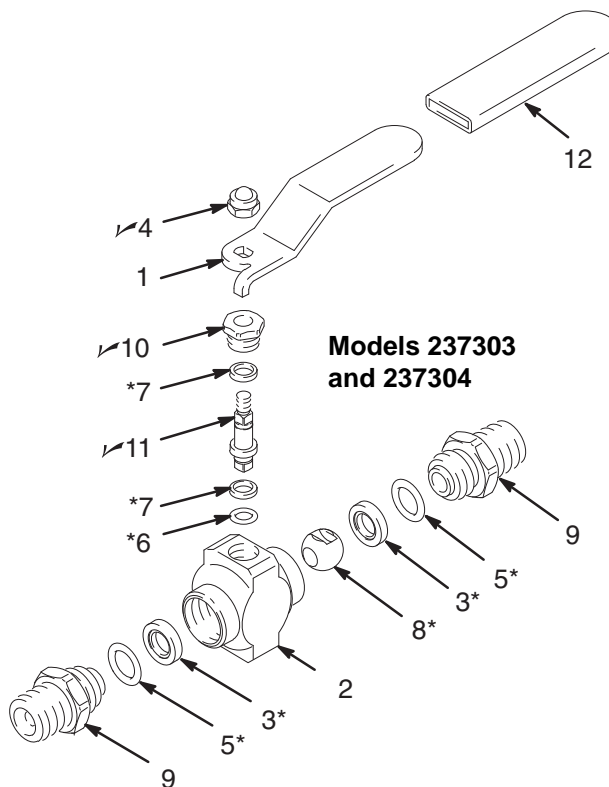
Model 248876, Series A

7400 psi (51 MPa, 510 bar) Maximum Working Pressure 3/8 npt(mbe), PTFE seals, PEEK seat, no lever

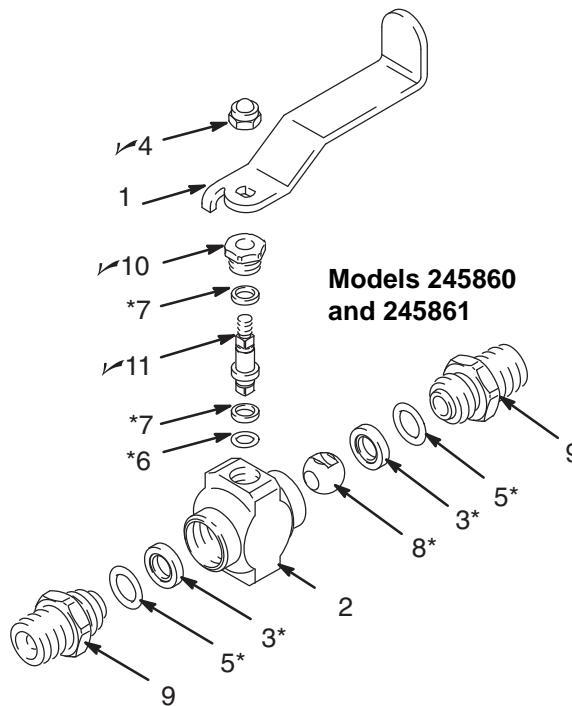
REF NO.	PART NO.	DESCRIPTION	QTY
1	190180	LEVER, valve, (Models 237303 and 237304)	1
	15A881	LEVER, valve, left hand (Model 245860, shown)	1
	15A882	LEVER, valve, right hand	1
	178747	LEVER, valve, (Model 248875)	1
2	178743	HOUSING, valve	1
3*	190179	SEAT, ball, PEEK	2
4✓	102310	NUT, hex; nylon cap; No. 10–32 (not on 248876)	1
5*	104892	SEAL, o-ring; PTFE	2
6*	104893	SEAL, o-ring; PTFE	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	165274	STUD, valve; 1/4 npt(m) Models 237303 and 248875	2
	165599	STUD, valve; 3/8 npt(m) (Models 237304, 245860, 245861 and 248876)	2
10✓	165964	NUT, packing	1
11✓	178745	STEM, valve	1
12	112907	GRIP, handle (Models 237303 and 237304 only)	1

* These parts are included in Repair Kit 237917, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



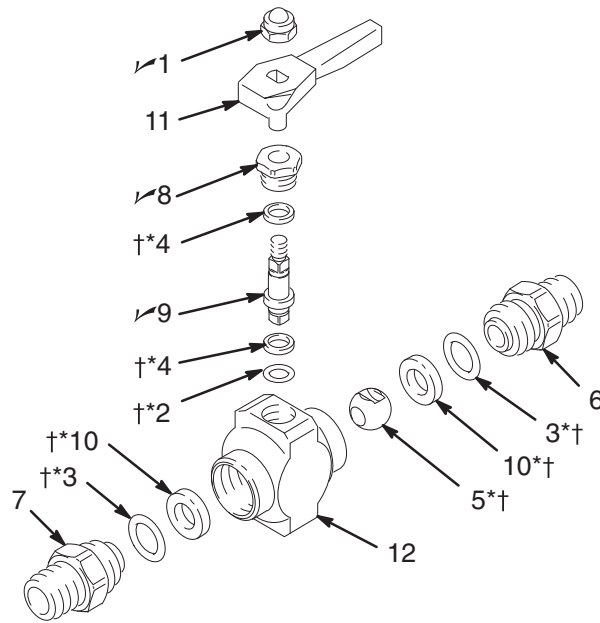
Models 237303 and 237304



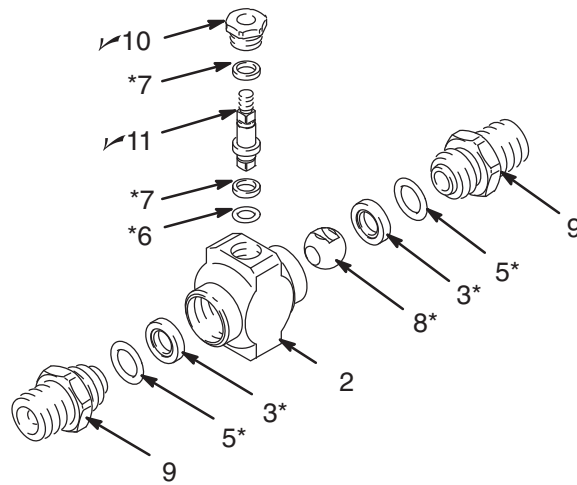
Models 245860 and 245861

One Way Valve Parts

Model 248875



Model 248876



One Way Valve Parts

Model 238612, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

3/8 npt(mbe), fluoroelastomer seals

Model 238635, Series A

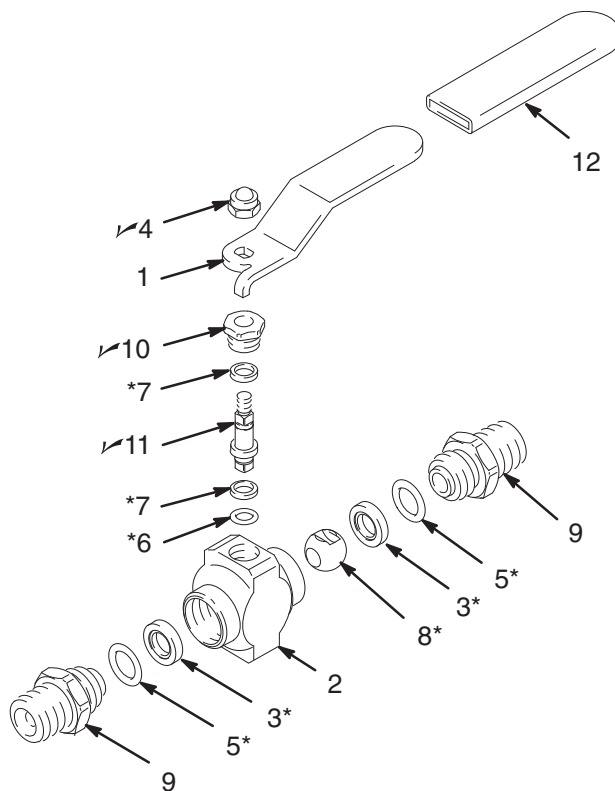
5000 psi (35 MPa, 350 bar) Maximum Working Pressure

1/4 npt(mbe), fluoroelastomer seals

REF PART NO. NO.	DESCRIPTION	QTY
1	190180 LEVER, valve	1
2	178743 HOUSING, valve	1
3*	172094 SEAT, ball, nylon	2
4✓	102310 NUT, hex; nylon cap; No. 10–32	1
5*	110241 SEAL, o-ring; fluoroelastomer	2
6*	110242 SEAL, o-ring; fluoroelastomer	1
7*	164900 WASHER, flat, nylon	2
8*	178746 BALL, valve	1
9	165599 STUD, valve; 3/8 npt(m) Model 238612	2
	165274 STUD, valve; 1/4 npt(m) Model 238635	2
10✓	165964 NUT, packing	1
11✓	178745 STEM, valve	1
12	112907 GRIP, handle	1

* These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



Model 262739, Series A (Includes Handle)

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

1/2 npt (fbe), PTFE seals, PEEK seats, stainless steel

Model 262740, Series A (No Handle)

7250 psi (50 MPa, 500 bar) Maximum Working Pressure

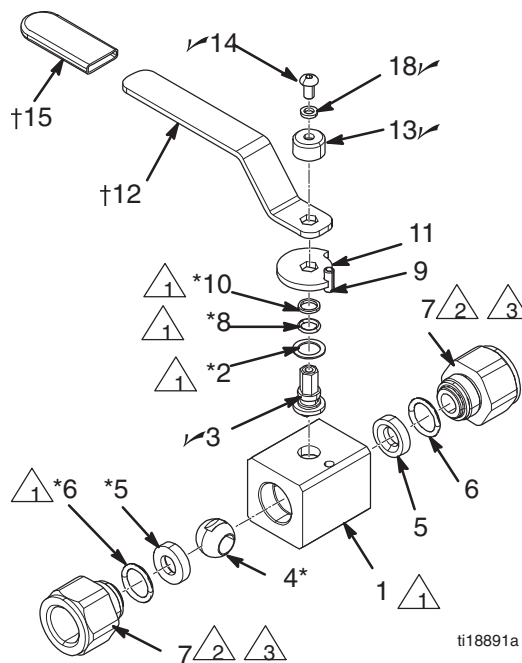
1/2 npt(mbe), PTFE seals, PEEK seats, stainless steel

REF PART NO. NO.	DESCRIPTION	QTY
1	16K986 HOUSING, ball valve, 1/2 in., sst	1
2*	16M175 RING, packing, valve, acetal	1
3	16M165 STEM, valve, ball, 1/2 npt, sst	1
4*	16M199 BALL, valve, 3/4, sst chrome	1
5*	16M174 SEAT, ball, valve, 1/2 npt, sst	1
6	867370 O-RING, seal, PTFE, 114	2
7	16M161 CAP, end, valve, 1/2 npt, sst	2
8*	113137 PACKING, o-ring; solvent resistant	2
9	107090 PIN, spring, straight	1
10*	126021 RING, backup; PTFE	1
11	16K988 STOP, handle; sst	1
12†	16K989 HANDLE, 1/2 in. ball valve; sst	1
13	16K987 CAP, locking; sst	1
14	551787 SCREW, 10–32 x 3/8 IN., sst	1
15†	112907 GRIP, handle; yellow	1
18	551788 WASHER, lock, split #10 sst	1

† Included in 262739 only.

* These parts are included in Repair Kit 24M601, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



- 1 Apply lithium grease.
- 2 Apply blue (medium) threadlocker on threads.
- 3 Torque to 60 ft-lbs (N?m).

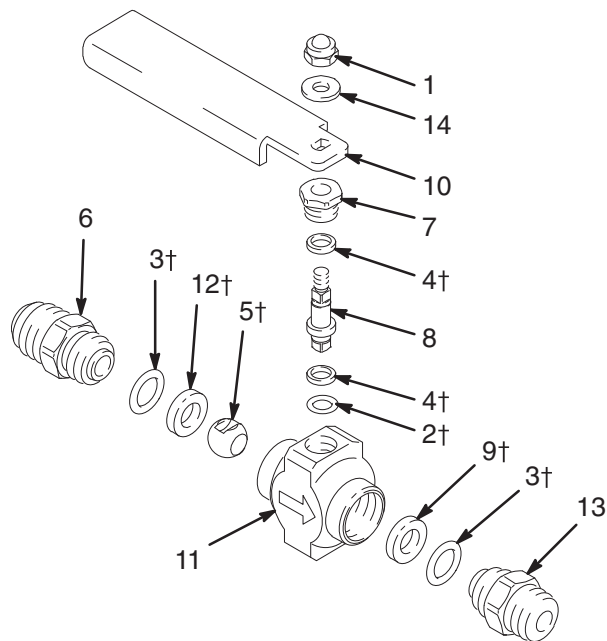
One Way Valve Parts

Model 237469, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(m) x 1/4 npt(m), fluoroelastomer seals, carbide seat

REF NO.	PART NO.	DESCRIPTION	QTY
	1	NUT, hex; nylon cap; No. 10-32	1
	2†	SEAL, o-ring; fluoroelastomer	1
	3†	SEAL, o-ring; fluoroelastomer	2
	4†	WASHER, flat, nylon	2
	5†	BALL, valve	1
	6	STUD, valve; 3/8 npt(m)	1
	7	NUT, packing	1
	8	STEM, valve	1
	9†	SEAT, ball, carbide	1
	10	LEVER, valve	1
	11	HOUSING, valve	1
	12†	SEAT, ball	1
	13	NIPPLE, 1/4 npt(m)	1
	14	WASHER, flat	1

† These parts are included in Repair Kit 237693, which may be purchased separately.



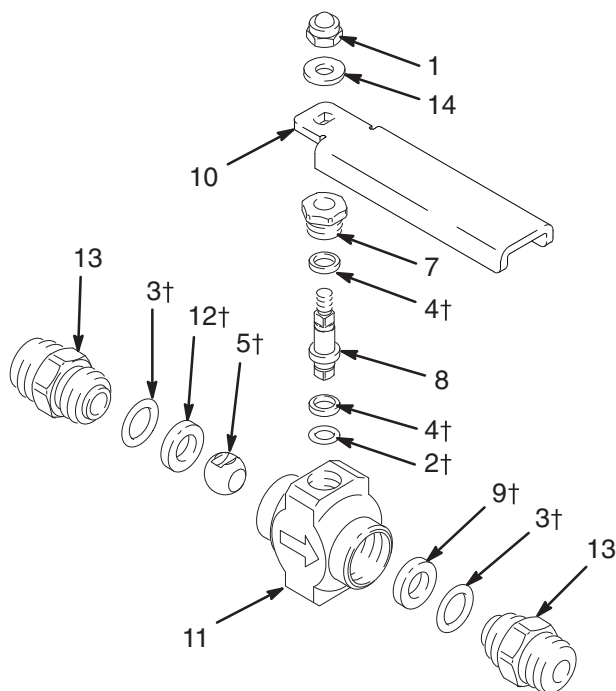
04332

Model 239280, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npt(m) x 1/4 npt(m), fluoroelastomer seals, carbide seat

REF NO.	PART NO.	DESCRIPTION	QTY
	1	NUT, hex; nylon cap; No. 10-32	1
	2†	SEAL, o-ring; fluoroelastomer	1
	3†	SEAL, o-ring; fluoroelastomer	2
	4†	WASHER, flat, nylon	2
	5†	BALL, valve	1
	7	NUT, packing	1
	8	STEM, valve	1
	9†	SEAT, ball, carbide	1
	10	LEVER, valve	1
	11	HOUSING, valve	1
	12†	SEAT, ball	1
	13	NIPPLE, 1/4 npt(m)	2
	14	WASHER, flat	1

† These parts are included in Repair Kit 237693, which may be purchased separately.



One Way Valve Parts

Model 210657, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npt(mbe), fluoroelastomer seals

Model 210658, Series B; Model 24F607, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(mbe), fluoroelastomer seals

Model 223960, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(mbe), PTFE seals

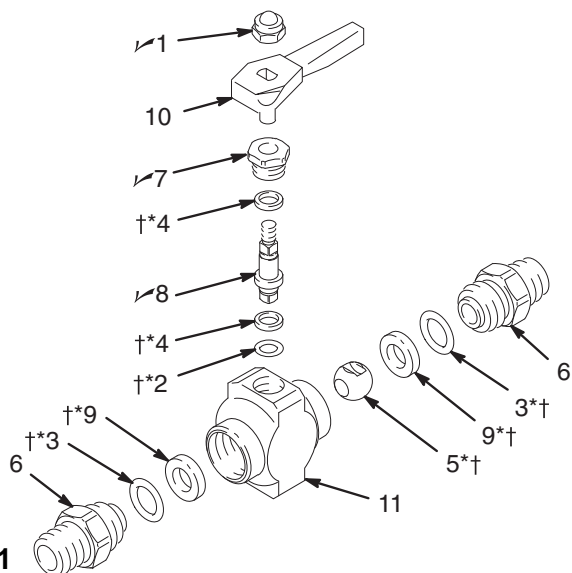
REF PART

NO.	NO.	DESCRIPTION	QTY
1	102310✓	NUT, hex; nylon cap; No. 10–32	1
2	110242†	SEAL, o-ring; fluoroelastomer <i>Models 210658 & 210657</i>	1
	104893*	SEAL, o-ring; PTFE <i>Model 223960</i>	1
3	110241†	SEAL, o-ring; fluoroelastomer <i>Models 210658 & 210657</i>	2
	104892*	SEAL, o-ring; PTFE <i>Model 223960</i>	2
4	164900*†	WASHER, flat, nylon	2
5	178746*†	BALL, valve	1
6	165274	STUD, valve; 1/4 npt(m) <i>Model 210657</i>	2
	165599	STUD, valve; 3/8 npt(m) <i>Model 210658 & 223960 only</i>	2
	16F448	STUD, valve, 3/8 npt(m) nickel plated <i>Model 24F607</i>	2
7	165964✓	NUT, packing	2
8	178745✓	STEM, valve	1
9	172094*†	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve <i>Models 210657, 210658, 223960</i>	1
	16F447	HOUSING, valve, nickel plated <i>Model 24F607</i>	2

* These parts are included in Repair Kit 217560, which may be purchased separately.

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



Model 210659, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(m) x 1/4 npt(m), fluoroelastomer seals

Model 223959, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(m) x 1/4 npt(m), PTFE seals

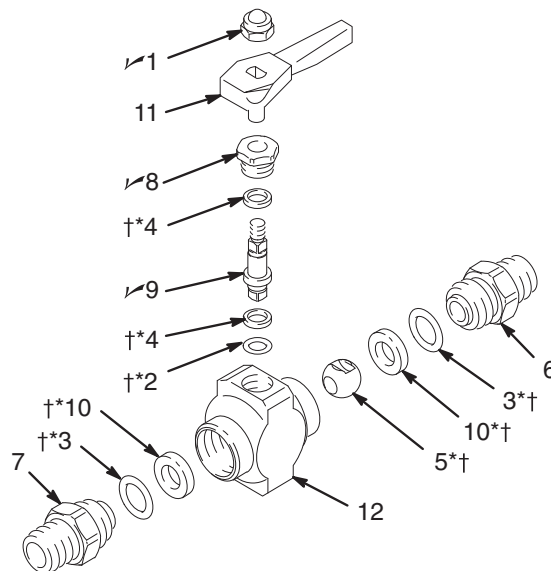
REF PART

NO.	NO.	DESCRIPTION	QTY
1	102310✓	NUT, hex; nylon cap; No. 10–32	1
2	110242†	SEAL, o-ring; fluoroelastomer <i>Model 210659</i>	1
	104893*	SEAL, o-ring; PTFE <i>Model 223959</i>	1
3	110241†	SEAL, o-ring; fluoroelastomer <i>Model 210659</i>	2
	104892*	SEAL, o-ring; PTFE <i>Model 223959</i>	2
4	164900*†	WASHER, flat, nylon	2
5	178746*†	BALL, valve	1
6	165274	STUD, valve; 1/4 npt(m)	1
7	165599	STUD, valve; 3/8 npt(m)	1
8	165964✓	NUT, packing	1
9	178745✓	STEM, valve	1
10	72094*†	SEAT, ball, nylon	2
11	178747	LEVER, valve	1
12	178743	HOUSING, valve	1

* These parts are included in Repair Kit 217560, which may be purchased separately.

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



One Way Valve Parts

Model 238694, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(mbe), PTFE seals, stainless steel

Models 235992, and 26A068 Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(m) x 1/4 npt(m), PTFE seals, stainless steel

Models 248271, and 26A078 Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npt(mbe), PTFE seals, stainless steel

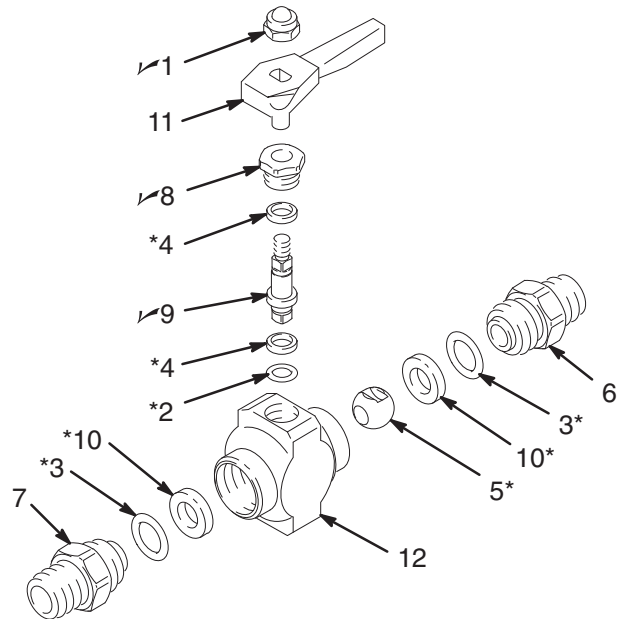
REF PART

NO.	NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2	104893*†	SEAL, o-ring; PTFE	1
3	104892*†	SEAL, o-ring; PTFE	2
4	164900*†	WASHER, flat, nylon	2
	17K752	WASHER, flat, nylon Model 26A068, 26A078	2
5	188745*†	BALL, valve	1
6		STUD, valve	
	188744	1/4 npt(m)	1
	17K751	1/4 npt(m) Model 26A068, 26A078	1
7		STUD, valve	
	188743	3/8 npt(m) Model 238694	1
	188744	1/4 npt(m) Model 235992, 248271	1
	17K750	3/8 npt(m) Model 26A068	1
	17K751	1/4 npt(m) Model 26A078	1
8✓	165964	NUT, packing	1
	17K748	NUT, packing Model 26A068, 26A078	1
9✓	188742	STEM, valve	1
10		SEAT, ball, nylon	
	190179†	Model 238694, 26A068, 26A078	2
	172094*	Model 235992, 248271	2
11	178747	LEVER, valve	1
12	188828	HOUSING, valve	1

* These parts are included in Repair Kit 236593, which may be purchased separately.

† These parts are included in Repair Kit 240147, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



Model 239018, Series A

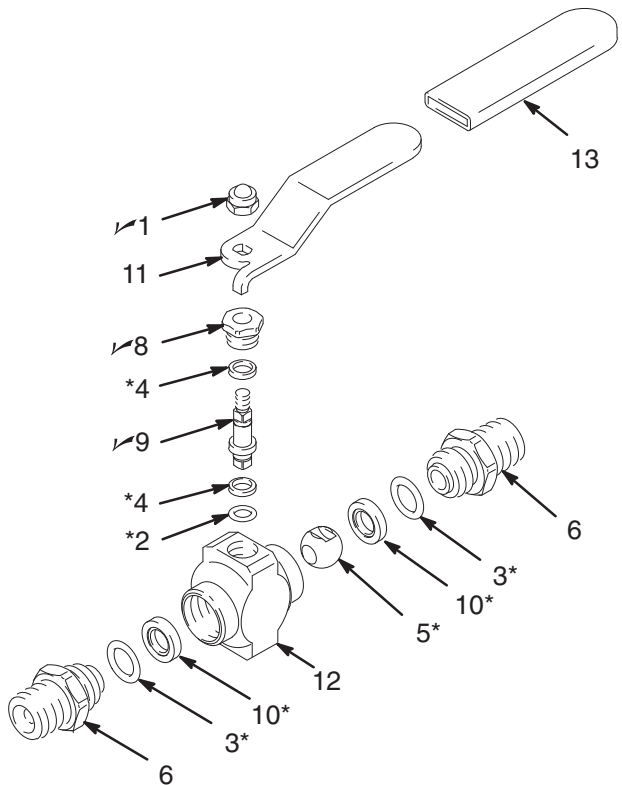
5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npt(mbe), PTFE seals, stainless steel

REF PART

NO.	NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2*	104893	SEAL, o-ring; PTFE	1
3*	104892	SEAL, o-ring; PTFE	2
4*	164900	WASHER, flat, nylon	2
5*	188745	BALL, valve	1
6	188744	STUD, valve; 1/4 npt(m)	2
8✓	165964	NUT, packing	1
9✓	188742	STEM, valve	1
10*	172094	SEAT, ball, nylon	2
11	190180	LEVER, valve	1
12	188828	HOUSING, valve	1
13	112907	GRIP, handle	1

* These parts are included in Repair Kit 236593, which maybe purchased separately.

✓ Keep these spare parts on hand to reduce down time.



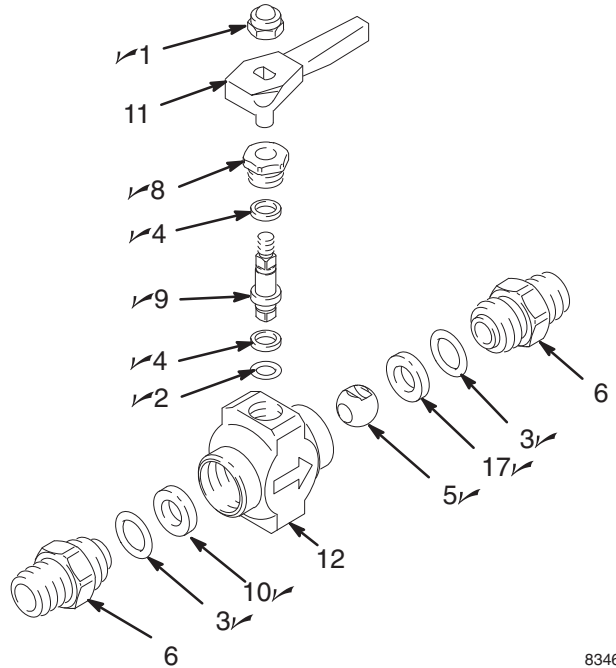
One Way Valve Parts

Model 240410, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
3/8 npt(mbe), PTFE seals, carbide and PEEK seats, stainless steel

REF	PART NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10-32	1
2✓	104893	SEAL, o-ring; PTFE	1
3✓	104892	SEAL, o-ring; PTFE	2
4✓	164900	WASHER, flat, nylon	2
5✓	193797	BALL, valve	1
6	188743	STUD, valve; 3/8 npt(m)	2
8✓	165964	NUT, packing	1
9✓	193798	STEM, valve	1
10✓	190179	SEAT, ball, PEEK	1
11	178747	LEVER, valve	1
12	188828	HOUSING, valve	1
17✓	223521	SEAT, ball, carbide	1

✓ Keep these spare parts on hand to reduce down time.



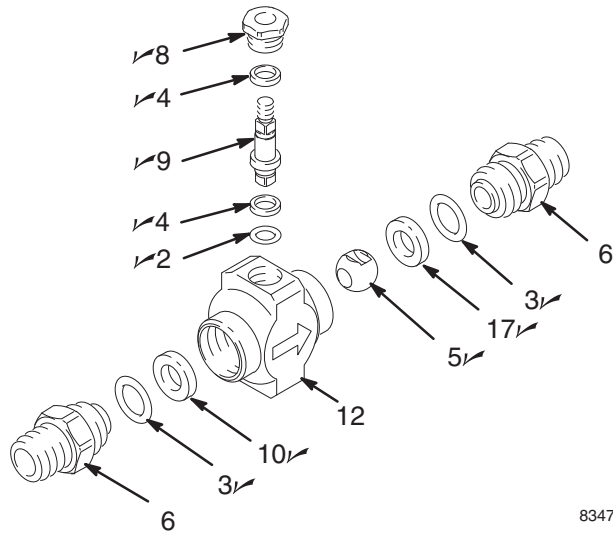
8346A

Model 240411, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npt(mbe), PTFE seals, carbide and PEEK seats, stainless steel, without handle

REF	PART NO.	DESCRIPTION	QTY
2✓	104893	SEAL, o-ring; PTFE	1
3✓	104892	SEAL, o-ring; PTFE	2
4✓	164900	WASHER, flat, nylon	2
5✓	193797	BALL, valve	1
6	188744	STUD, valve; 1/4 npt(m)	2
8✓	165964	NUT, packing	1
9✓	193798	STEM, valve	1
10✓	190179	SEAT, ball, PEEK	1
12	188828	HOUSING, valve	1
17✓	223521	SEAT, ball, carbide	1

✓ Keep these spare parts on hand to reduce down time.



8347A

One Way Valve Parts

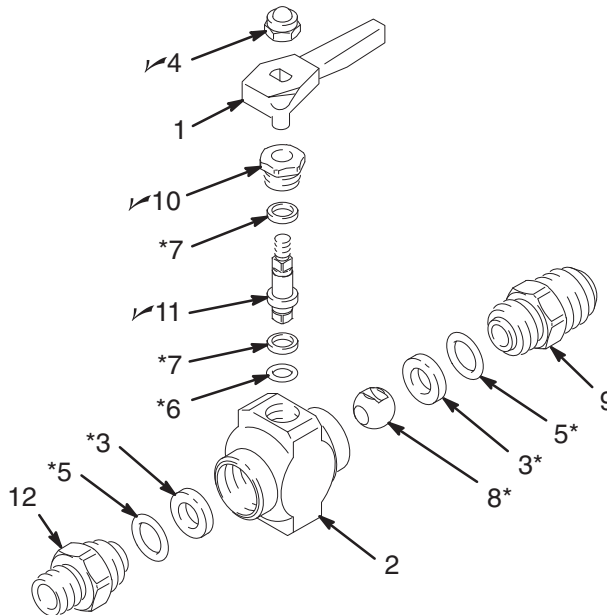
Model 218901, Series A

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npsm(m) x 3/4-16 unf-2a, PTFE seals

REF	PART NO.	DESCRIPTION	QTY
1	178747	LEVER, valve	1
2	178743	HOUSING, valve	1
3*	172094	SEAT, ball, nylon	2
4✓	102310	NUT, hex; nylon cap; No. 10-32	1
5*	104892	SEAL, o-ring; PTFE	2
6*	104893	SEAL, o-ring; PTFE	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	181038	NIPPLE, adapter; 3/4-16 unf-2a(m)	1
10✓	165964	NUT, packing	1
11✓	178745	STEM, valve	1
12	181037	NIPPLE, adapter; 1/4-18 npsm(m)	1

* These parts are included in Repair Kit 217560, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



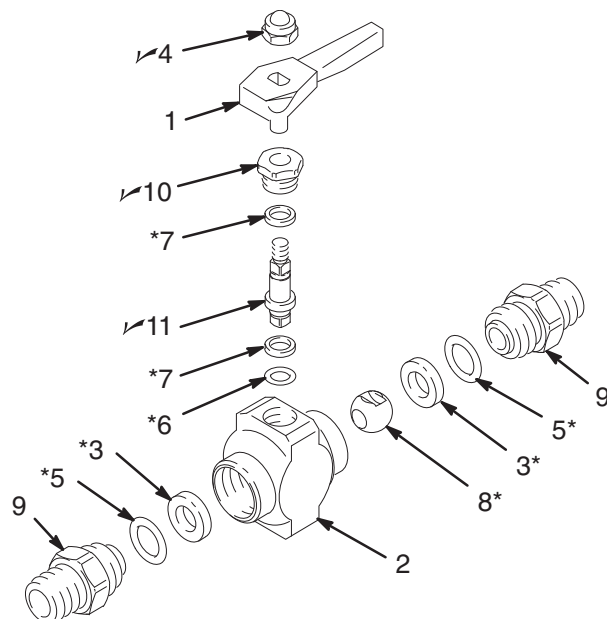
Model 214037, Series B

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npt(mbe), PTFE seals

REF	PART NO.	DESCRIPTION	QTY
1	178747	LEVER, valve	1
2	178743	HOUSING, valve	1
3*	172094	SEAT, ball, nylon	2
4✓	102310	NUT, hex; nylon cap; No. 10-32	1
5*	104892	SEAL, o-ring; PTFE	2
6*	104893	SEAL, o-ring; PTFE	1
7*	164900	WASHER, flat, nylon	2
8*	178746	BALL, valve	1
9	165274	STUD, valve; 1/4 npt(m)	2
10✓	165964	NUT, packing	1
11✓	178745	STEM, valve	1

* These parts are included in Repair Kit 217560, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



One Way Valve Parts

Model 224441

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

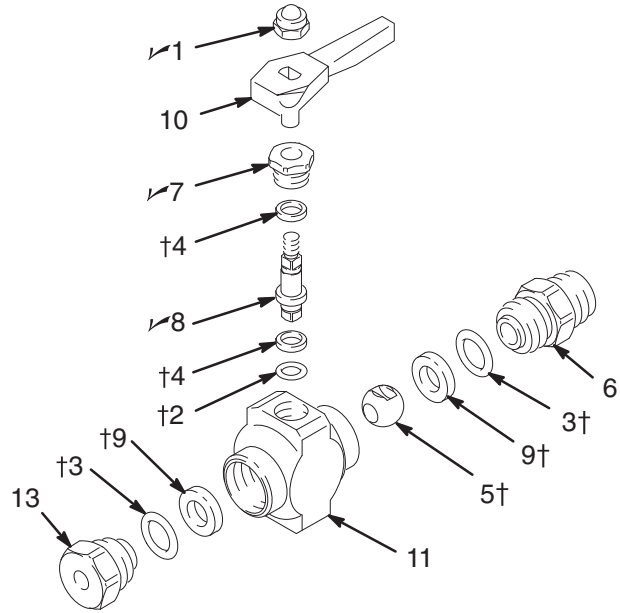
3/8 npt(m) one end, fluoroelastomer seals

REF PART

NO.	NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10–32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	178746	BALL, valve	1
6	165599	STUD, valve; 3/8 npt(m)	1
7✓	165964	NUT, packing	1
8✓	178745	STEM, valve	1
9†	172094	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve	1
13	186170	ADAPTER	1

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



Model 235573

5000 psi (35 MPa, 350 bar) Maximum Working Pressure

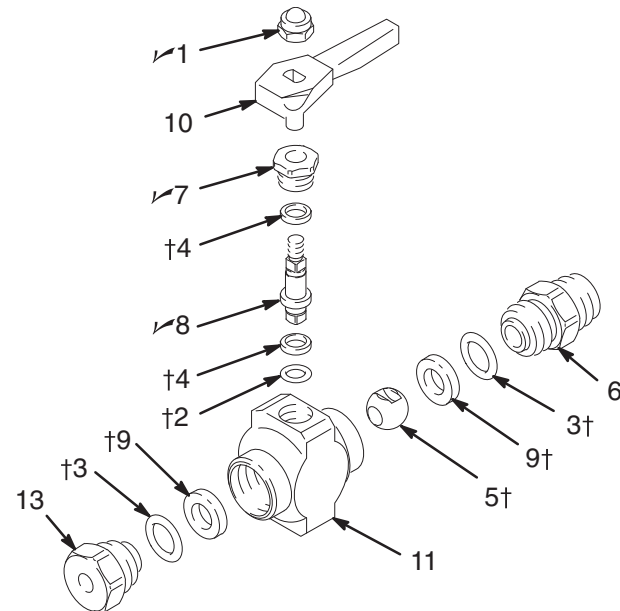
3/8 npt(m) one end, fluoroelastomer seals, carbide seat

REF PART

NO.	NO.	DESCRIPTION	QTY
1✓	102310	NUT, hex; nylon cap; No. 10–32	1
2†	110242	SEAL, o-ring; fluoroelastomer	1
3†	110241	SEAL, o-ring; fluoroelastomer	2
4†	164900	WASHER, flat, nylon	2
5†	165273	BALL, valve	1
6	165274	STUD, valve; 3/8 npt(m)	1
7✓	165964	NUT, packing	1
8✓	187163	STEM, valve	1
9†	172094	SEAT, ball, nylon	2
10	178747	LEVER, valve	1
11	178743	HOUSING, valve	1
13	186170	ADAPTER	1

† These parts are included in Repair Kit 217559, which may be purchased separately.

✓ Keep these spare parts on hand to reduce down time.



Check Valve Parts

NOTE: To operate properly, the valve must be mounted in an upright position with the housing (Ref No. 3, below) facing up.

⚠ CAUTION

Do not wash nitrile o-rings in aromatic thinners as these thinners cause the o-rings to deteriorate.

Model 206831

3000 psi (21 MPa, 210 bar) Maximum Working Pressure
3/8 npt(m) x 3/8 npsm(f) swivel

REF PART

NO.	NO.	DESCRIPTION	QTY
1	206830	HOUSING, valve	1
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1
3	166700	HOUSING, adapter	1
4	166701	PIN	1
5✓	166702	O-RING; nitrile rubber	1

✓ Keep these spare parts on hand to reduce down time.

Model 206833

3000 psi (21 MPa, 210 bar) Maximum Working Pressure
3/8 npt(m) x 3/8 npsm(f) 90° swivel

REF PART

NO.	NO.	DESCRIPTION	QTY
1	206832	HOUSING, valve	1
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1
3	166700	HOUSING, adapter	1
4	166701	PIN	1
5✓	166702	O-RING; nitrile rubber	1

✓ Keep these spare parts on hand to reduce down time.

Model 206962

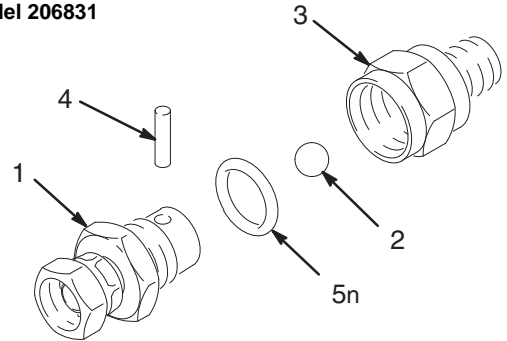
3000 psi (21 MPa, 210 bar) Maximum Working Pressure
3/8 npt(mbe)

REF PART

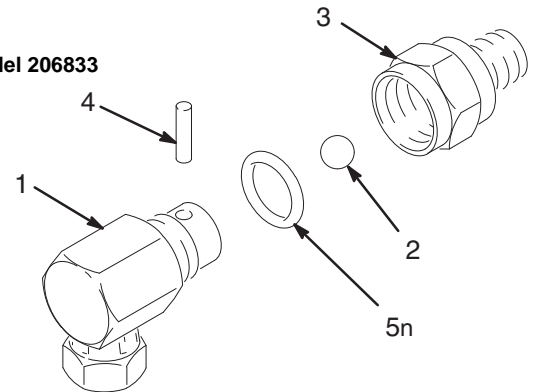
NO.	NO.	DESCRIPTION	QTY
1	206961	HOUSING, valve	1
2	101874	BALL, sst; 0.5 in. (13 mm) dia.	1
3	166700	HOUSING, adapter	1
4	166701	PIN	1
5✓	166702	O-RING; nitrile rubber	1

✓ Keep these spare parts on hand to reduce down time.

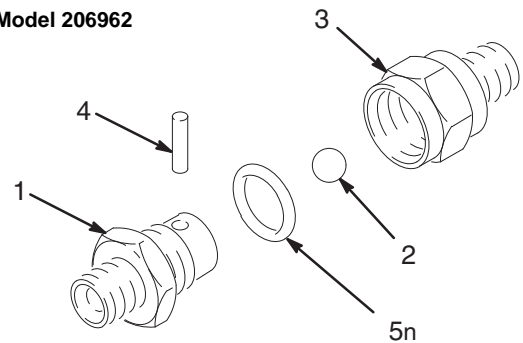
Model 206831



Model 206833



Model 206962



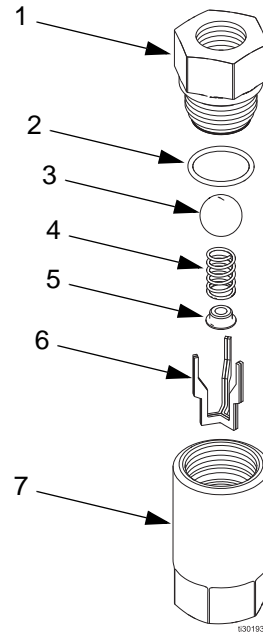
Check Valve Parts

Models 16T481, 24S039

7250 psi (50 MPa, 500 bar) Maximum Working Pressure
3/4 npt(f) x 3/4 npt(f)

REF NO.	PART NO.	DESCRIPTION	QTY
1	16T479	NUT, seat (Model 16T481)	1
	24S040	NUT, seat (Model 24S039)	1
2	102595	PACKING, o-ring	1
3	102972	BALL, metallic	1
4	108361	SPRING, compression	1
5	181535	RETAINER, spring (Model 16T481)	1
	17A621	RETAINER, spring (Model 24S039)	1
6	181492	GUIDE, ball (Model 16T481)	1
	17A619	GUIDE, ball (Model 24S039)	1
7	16T477	HOUSING, ball check (Model 16T481)	1
	17A617	HOUSING, ball check (Model 24S039)	1

Models 16T481, 24S039

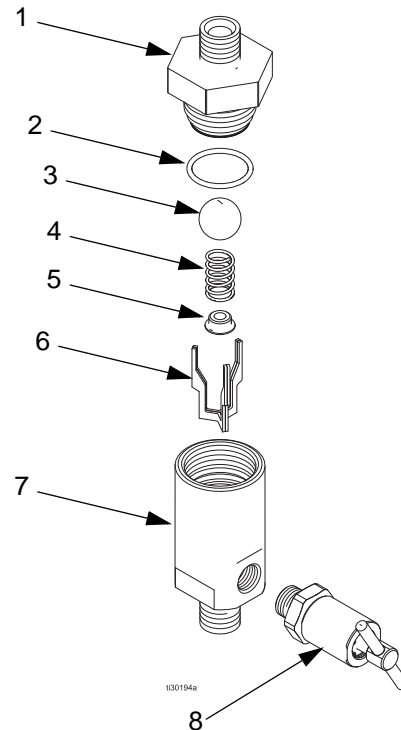


Models 25C189, 127631

7250 psi (50 MPa, 500 bar) Maximum Working Pressure
1/2 npt(m) x 1/2 npt(m) Model 25C189
3/4 npt(m) x 1/2 npt(m) Model 127631

REF NO.	PART NO.	DESCRIPTION	QTY
1	127882	NUT, seat (includes 2* and 3) (Model 127631)	1
	25C190	NUT, seat (includes 2* and 3) (Model 25C189)	1
2	102595	PACKING, o-ring	1
3	102972	BALL, metallic	1
4	108361	SPRING, compressor	1
5	181535	RETAINER, spring	1
6	181492	GUIDE, ball	1
7	17A091	HOUSING, ball check	1
8	245143	VALVE, pressure bleed	1

Models 25C189, 127631



* If the outlet check valve is disassembled, the o-ring (2) must be replaced. The o-ring is designed to be crushed, and not reused.

Swivel Parts

NOTE: For other high pressure swivels, see instruction manual 307005.

Model 239663

3600 psi (25 MPa, 250 bar) Maximum Working Pressure
1/4 npt(m) x 1/4 npsm(f) swivel, leather packings

Model 223341

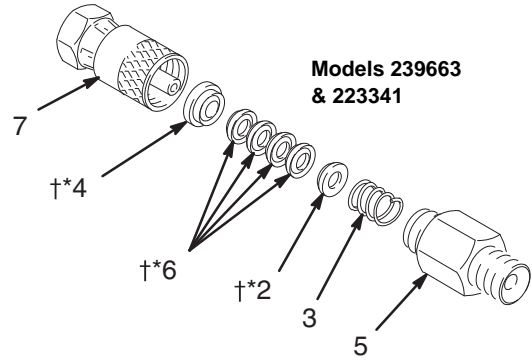
3600 psi (25 MPa, 250 bar) Maximum Working Pressure
1/4 npt(m) x 1/4 npsm(f) swivel, PTFE packings

REF PART

NO.	NO.	DESCRIPTION	QTY
2	150516*†	GLAND, male	1
3	150522	SPRING	1
4	157894*†	GLAND, female	1
5	188986	HOUSING, swivel	1
6	162694*	V-PACKING, leather (Model 239663)	4
	183978†	V-PACKING, PTFE (Model 223341)	4
7		BODY <i>not sold separately</i>	1

* These parts are included in Repair Kit 207839, which may be purchased separately.

† These parts are included in Repair Kit 223342, which may be purchased separately.



Models 239663
& 223341

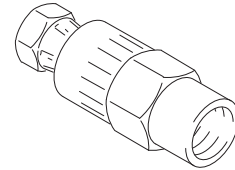
Model 214926 This swivel is not repairable

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/2 npsm(f) x 3/8 npt(f), leather packings.

Model 214925 This swivel is not repairable

5000 psi (35 MPa, 350 bar) Maximum Working Pressure
1/4 npsm(f) x 3/8 npt(f), leather packings.

Model s214925
and 214926

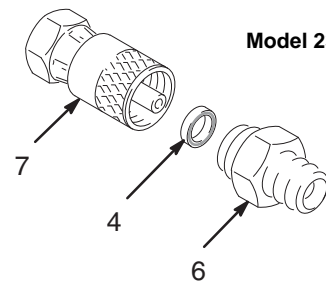


Model 236987

7400 psi (51 MPa, 510 bar) Maximum Working Pressure
1/4 npsm(f) x 1/4 npsm(m), PTFE seal

REF PART

NO.	NO.	DESCRIPTION	QTY
4	112725	SEAL; PTFE	1
6	189966	HOUSING, swivel	1
7		BODY <i>not sold separately</i>	1



Model 236987

Graco Standard Warranty

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Graco Information

For the latest information about Graco products, visit www.graco.com.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6921 **or Toll Free:** 1-800-328-0211 **Fax:** 612-378-3505

All written and visual data contained in this document reflects the latest product information available at the time of publication. Graco reserves the right to make changes at any time without notice.

Original instructions. This manual contains English. MM 306861

Graco Headquarters: Minneapolis

International Offices: Belgium, China, Japan, Korea

GRACO INC. AND SUBSIDIARIES • P.O. BOX 1441 • MINNEAPOLIS MN 55440-1441 • USA
Copyright 1993, Graco Inc. All Graco manufacturing locations are registered to ISO 9001.

www.graco.com

Revision ZAD, October 2016