

Established  
1982



A PUMP & VALVE MFG. COMPANY

Houston, Texas



*Engineered for High Performance...*



*World Class Quality!*

MODELS: **F, G & GA**

1R • 1F2R • 2F3R • 3F • 3 1/2 IF • 4R • 4F • 5R • 5F6R • 6F

*Heavy Duty*



**Drill Pipe Float Valves**

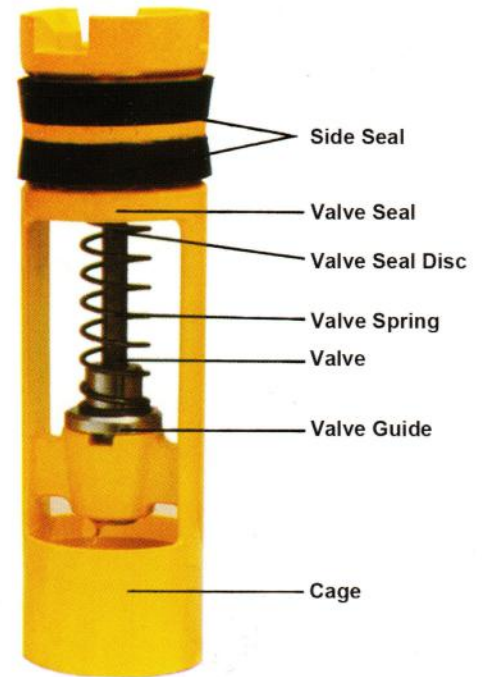


# MODEL ' F ' - PLUNGER TYPE

O'Drill • MCM Float Valves & parts are 100% interchangeable with Baker®

## MODEL ' F '

SIZE	Mfg	COMPLETE ASSEMBLY P/N	METAL REPAIR KIT P/N	RUBBER REPAIR KIT P/N
1R	O'DRILL BAKER®	M-131-200 480131200	M-929-800 015929800	M-012-200 016012200
1F	O'DRILL BAKER®	M-131-422 480131422	M-011-300 016011300	M-012-300 016012300
2F	O'DRILL BAKER®	M-132-432 480132432	M-011-400 016011400	M-012-400 016012400
3R	O'DRILL BAKER®	M-133-400 480133400	M-011-500 016011500	M-012-500 016012500
3F	O'DRILL BAKER®	M-133-400 480133400	M-011-500 016011500	M-012-500 016012500
31/2 IF	O'DRILL BAKER®	M-133-600 480133600	M-011-500 016011500	M-012-600 016012600
4R	O'DRILL BAKER®	M-134-200 480134200	M-011-700 016011700	M-012-700 016012700
4F	O'DRILL BAKER®	M-134-400 480134400	M-011-800 016011800	M-012-800 016012800
5R	O'DRILL BAKER®	M-135-200 480135200	M-011-900 016011900	M-012-900 016012900
5F	O'DRILL BAKER®	M-135-462 480135462	M-012-000 016012000	M-013-000 016013000
6R	O'DRILL BAKER®	M-135-462 480135462	M-012-000 016012000	M-013-000 016013000
6F	O'DRILL BAKER®	M-136-400 480136400	M-012-100 016012100	M-013-100 016013100



Piston Type

## Replacement Parts List for Model ' F '

	Description	1R	1F 2R	2F 3R	3F	31/2 IF	4R	4F	5R	5F 6R	6F
1	CAGE	M-30574	M-30568	M-30538	M-30556	M-38527	M-30526	M-30532	M-30544	M-30550	M-30562
2	VALVE	M-30575	M-30569	M-30539	M-30557	M-30557	M-30527	M-30533	M-30545	M-30551	M-30563
3	VALVE SEAL	M-30576	M-30570	M-30540	M-30558	M-30558	M-30528	M-30534	M-30546	M-30552	M-30564
4	VALVE SEAL DISC	M-30577	M-30571	M-30541	M-30559	M-30559	M-30529	M-30535	M-30547	M-30553	M-30565
5	VALVE GUIDE	M-30572	M-30572	M-30542	M-30560	M-30560	M-30530	M-30536	M-30548	M-30554	M-30566
6	VALVE SPRING	M-05560	M-05626	M-01751	M-02013	M-02013	M-29610	M-27600	M-30883	M-30884	M-07369
7	SIDE SEAL	M-05561	M-05625	M-03939	M-02015	M-03986	M-03940	M-01908	M-03941	M-01958	M-01990

### Repair Kits

MODEL	Metal Repair Kit	Rubber Repair Kit
<b>F</b>	3 valve springs, 1 valve, 1 valve guide, 1 valve seal disc	8 side seals, 2 valve seals

When quality counts .... count on **O'Drill/MCM**

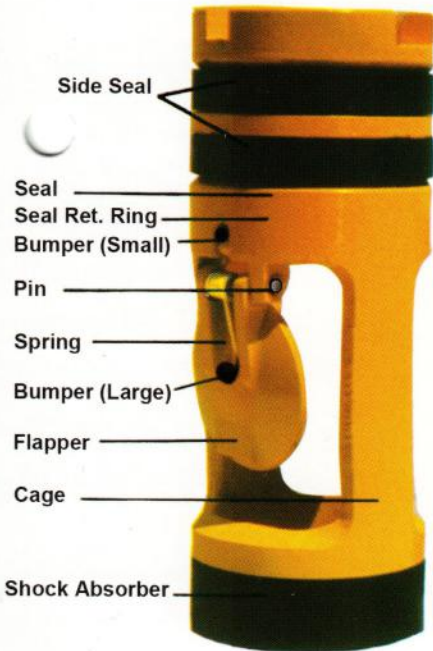
# MODEL ' G ' - Full Flow FLAPPER TYPE

O'Drill • MCM Float Valves & parts are 100% interchangeable with Baker®

## MODEL ' G '

## MODEL ' GA '

SIZE	Mfg	Complete Assembly P/N	Metal Repair-Kit P/N	Rubber Repair Kit P/N	Complete Assembly P/N	Metal Repair-Kit P/N	Rubber Repair Kit P/N
2F 3R	O'DRILL BAKER®	M-152-432 480152432	M-013-200 016013200	M-013-800 016013800	M-162-432 480162432	M-135-000 017135000	M-013-800 016013800
3F	O'DRILL BAKER®	M-153-400 480153400	M-013-300 016013300	M-013-900 016013900	M-163-400 480163400	M-136-700 017136700	M-013-900 016013900
3 1/2 IF	O'DRILL BAKER®	M-153-600 480153600	M-013-300 016013300	M-982-000 051982000	M-163-600 480163600	M-136-700 017136700	M-982-000 051982000
4R	O'DRILL BAKER®	M-154-200 480154200	M-013-400 016013400	M-014-000 016014000	M-164-200 480164200	M-116-000 017116000	M-014-000 016014000
4F	O'DRILL BAKER®	M-154-400 480154400	M-013-500 016013500	M-014-100 016014100	M-164-400 480164400	M-136-800 017136800	M-014-100 016014100
5R	O'DRILL BAKER®	M-155-200 480155200	M-013-600 016013600	M-014-200 016014200	M-165-200 480165200	M-136-900 017136900	M-014-200 016014200
5F 6R	O'DRILL BAKER®	M-155-462 480155462	M-013-700 016013700	M-014-300 016014300	M-165-462 480165462	M-134-200 017134200	M-014-300 016014300



Flapper Type

## Replacement Part List for Model ' G '

	Description	2F	3R	3F	3 1/2 IF	4R	4F	5R	5F	6R
1	CAGE	M-44231	M-46278	M-19658	M-44195	M-46272	M-47718	M-44238		
2	SIDE SEAL	M-03939	M-02015	M-03986	M-03940	M-01908	M-03941	M-01958		
3	SPRING	M-44235	M-46231	M-46231	M-44210	M-46226	M-46226	M-44240		
4	SEAL RETAINING RING	M-44233	M-46287	M-46287	M-43587	M-46277	M-47722	M-44237		
5	SEAL	M-43574	M-46243	M-46243	M-41303	M-45340	M-47721	M-43597		
6	FLAPPER-VALVE	M-27065	M-27054	M-27054	M-27064	M-27052	M-27053	M-27066		
7	BUMPER (LARGE)	M-44243	M-44243	M-44243	M-44213	M-44213	M-44213	M-44213		
8	PIN	M-43575	M-43575	M-43575	M-46397	M-46397	M-47723	M-43595		
9	SHOCK ABSORBER	M-43573	M-46242	M-19659	M-42709	M-45339	M-47720	M-43596		
10	BUMPER (SMALL)	M-44214	M-44214	M-44214	M-44214	M-44214	M-44214	M-44214		
11	SPRING ASSY.	M-47763	M-47764	M-47764	M-47760	M-47761	M-47761	M-47762		

## Repair Kits

MODEL	Metal Repair Kit	Rubber Repair Kit
G GA	1 seal retaining ring, 3 spring assembly, 3 hinge pins 1 flapper valve	8 side seals, 1 shock absorber, 2 valve seals, 1 seal retaining ring

Check out our QUALITY... Compare our prices,  
...We are your Best Choice!!!

Call: (713) 541-2020 • Fax: (713) 541-9090

## MODEL ' F '

### PLUNGER TYPE WITH 'VITON' SEALS

SIZE	COMPLETE ASSEMBLY P/N	METAL REPAIR KIT P/N	RUBBER REPAIR KIT P/N
1R	M-301-200	M-084-901	M-081-701
1F 2R	M-301-422	M-085-001	M-081-801
2F 3R	M-302-432	M-085-101	M-081-901
3F	M-303-400	M-085-201	M-082-001
3 1/2 IF	M-303-600	M-085-301	M-082-101
4R	M-304-200	M-085-401	M-082-201
4F	M-304-400	M-085-501	M-082-301
5R	M-305-200	M-085-601	M-082-401
5F 6R	M-305-462	M-085-701	M-082-501
6F	M-306-400	M-085-801	M-082-601

## MODEL ' G '

### FULL FLOW FLAPPER TYPE WITH 'VITON' SEALS

SIZE	COMPLETE ASSEMBLY P/N	METAL REPAIR KIT P/N	RUBBER REPAIR KIT P/N
2F 3R	M-312-432	M-085-901	M-082-701
3F	M-313-400	M-086-001	M-082-801
4R	M-314-200	M-086-101	M-082-901
4F	M-314-400	M-086-201	M-083-001
5R	M-315-200	M-086-301	M-083-101
5F 6R	M-315-462	M-086-401	M-083-201

## Float Valve Installation

O'Drill•MCM drill pipe float valves are easy to install. Simply lubricate the side seal rubbers and slide the float valve into the cavity in the float body or drilled out drill collar.

**CAUTION:** Care must be taken in positioning the float valve in the drilling string. Fill drill pipe regularly when going in the hole. Failure to do so can cause hydro-static pressure which can cause damage to the drill pipe and/or float valve.

## Recutting drill pipe float body or Boring out drill collars

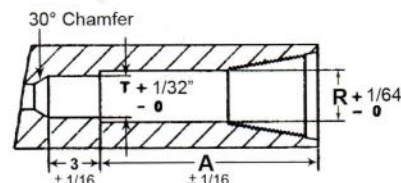
Models 'F' and 'G' are identical in outside dimensions and use the same float body or bored out drill collar. Float subs are available in 14 to 24 inches, depending on connection size. Designed for two recuts, one on each end or two on one end. Care should be taken to maintain dimension 'A' on all recuts.

## O'Drill / MCM, Inc.

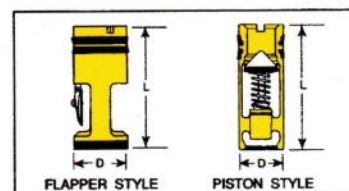
## Dimensional Data

Size Valve	D Diameter of Valve	R (D Plus 1/32) Diameter of Recess for Valve	L Length of Valve	T* Diameter of Recess for TOTCO Spider
1R	1 21/32	1 11/32	5 7/8	1 5/16
1F-2R	1 29/32	1 15/32	6 1/4	1 1/2
2F-3R	2 13/32	2 7/16	6 1/2	1 29/32
3F	2 13/16	2 27/32	10	2 7/16
3 1/2 IF	3 1/8	3 5/32	10	2 11/16
4R	3 15/32	3 1/2	8 5/16	2 15/16
4F	3 21/32	3 11/16	12	3 1/4
5R	3 7/8	3 29/32	9 3/4	3 3/8
5F-6R	4 25/32	4 13/16	11 3/4	4 9/32
6F	5 11/16	5 23/32	14 5/8	5 3/16

\* If this diameter is the same or smaller than standard tool joint ID, disregard it.



A = L (Length of Valve Assembly)  
+ Length of Tool Joint Pin = 1/4"



## Drill Pipe Float Valve Subs

API Regular Threads - Box or Pin

SIZE	O.D.	I.D.	LENGTH	VALVE
2 1/2"	3 1/4"	1"	18"	1R
2 1/2"	3 3/4"	1 1/4"	20"	1F-2R
3 1/2"	4 1/4"	1 1/2"	20"	2F-3R
4 1/2"	5 1/2"	2 1/4"	24"	4R
5 1/2"	6 3/4"	2 3/4"	28"	5R
6 1/2"	7 3/4"	3 1/2"	30"	5F-6R
7 1/2"	8 1/2"	4"	30"	5F-6R
8 1/2"	10"	4 3/4"	30"	6F

API Full Hole - Box or Pin

SIZE	O.D.	I.D.	LENGTH	VALVE
2 1/2"	4 1/4"	2 1/4"	20"	2F-3R
3 1/2"	4 3/4"	2 1/2"	24"	3F
4"	5 1/4"	2 3/8"	24"	3 1/2 IF
4 1/2"	5 3/4"	3"	28"	4F
5 1/2"	7"	4"	30"	5F-6R
6 1/2"	8"	5"	30"	6F

API IF Internal Flush - Box or Pin

SIZE	O.D.	I.D.	LENGTH	VALVE
2 1/2"	3 3/4"	1 3/4"	18"	1F-2R
2 1/2"	4 1/8"	2 1/8"	20"	2F-3R
3 1/2"	4 3/4"	2 1/8"	24"	3 1/2 IF
4"	5 3/4"	3 1/4"	28"	4F
4 1/2"	6 1/4"	3 3/4"	28"	5R
5 1/2"	7 1/4"	4 1/8"	30"	5F-6R
6 1/2"	8 3/4"	5 3/8"	30"	6F