

Model FT15 / FT25 SIGHT GLASS GAGE VALVE

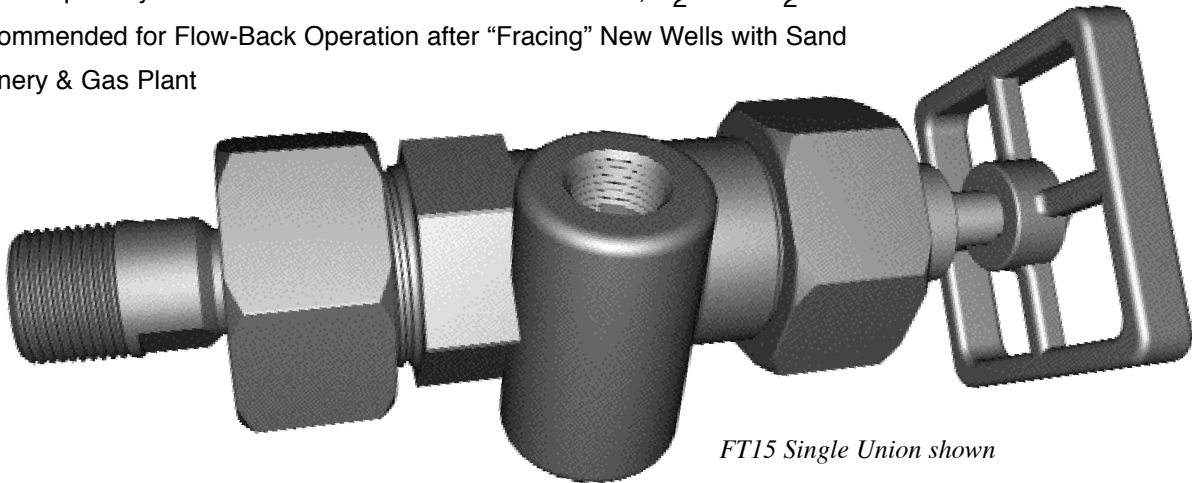
**“FREE TURN”
valves for
flat glass
gages**

Bulletin FT
Issued 2/11
Replaces 6/10

NO-FREEZE VALVES

4000 PSIG @ 100°F
NACE MR-01-75 conformance

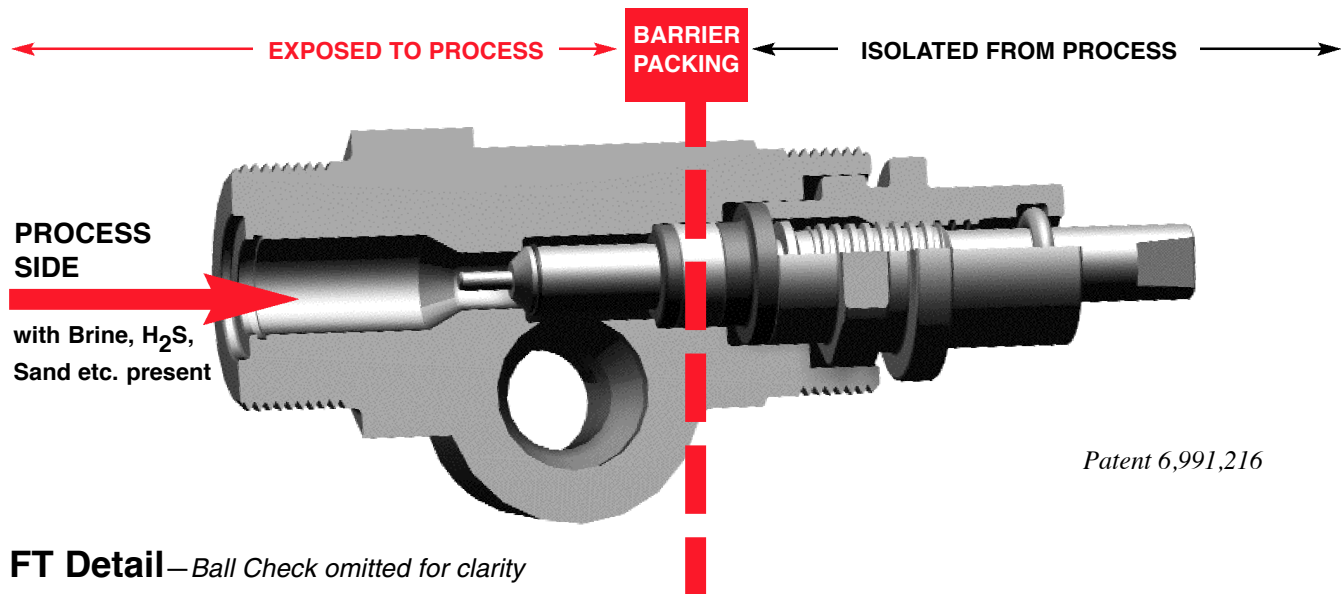
- Oil & Gas Separators
- Compressor Scrubbers
- Especially Suited for Natural Gas Service with Brine, H₂S or CO₂
- Recommended for Flow-Back Operation after “Fracing” New Wells with Sand
- Refinery & Gas Plant



FT15 Single Union shown

EXCLUSIVE DESIGN... ISOLATED WORKING THREADS

- **Sealed Workings**—Not vulnerable to process corrosion
- **Cost Savings**— “FT” valves stay operable—no need to add double block valves
- **Clean & Readable Sight Glasses**— Operable gage valves permit sight glass to be isolated from vessel & accessed for cleaning
- **Safer Operation**—Large wrench not needed to break loose a frozen valve stem operating under high pressure.
- **Environmental Advantage**— Operator is assured that valve stem is in correct position because the stem stays free to turn. Ball checks are designed to shut off automatically in event of glass breakage but they will not work when valve is partially open. A broken sight glass with no ball check protection can result in environmental spill.



FT Detail—Ball Check omitted for clarity

INFERNO

MANUFACTURING CORPORATION

115 RICOU ST • SHREVEPORT, LA 71107-6933
318-221-8454 • FAX 318-222-4106 • www.infernomfg.com

PAGE
FT1

MODEL FT15 / FT25

OFFSET PATTERN UNION BONNET INTEGRAL SEAT		OPTIONAL
		STANDARD
VESSEL CONNECTION		
Flat Union	1/2" M-NPT	X
	3/4" M-NPT	X
	1" M-NPT (Non-Float)	X
Spherical Union	Male S/W or Flanged	X
	1/2" M-NPT	X
	3/4" M-NPT	X
Male S/W or Flanged		X
		X
		X
GAGE CONNECTION		
Rigid (FT15)	1/2" F-NPT	X
	3/4" F-NPT	X
		X
Flat Union (FT25)	1/2" F-NPT	X
	3/4" F-NPT	X
	1/2" M-NPT	X
	3/4" M-NPT	X
Spherical Union (FT25)	1/2" M-NPT	X
	3/4" M-NPT	X
VENT / DRAIN CONNECTION		
Rigid	1/2" F-NPT	X
	3/4" F-NPT	X
STEM PACKING		
	TFE (up to 500°F)	X
	GRAFOIL™	X
TRIM		
	T316 SS	X
BALL CHECK SHUT-OFF		
	Horizontal Lower & Upper	X
	Vertical Rising Lower Ball Option	X
UNION VESSEL SEAL		
	Viton™ (up to 400°F)	X
	Buna (Lo-Temp Option)	X
	Aflas™ (to 400°F Steam)	X
	Kalrez™ (Hi Temp Steam)	X
	TFE	X
	Omitted	X

STANDARD BENEFITS

O-Ring Seal



Union Nut omitted for clarity

O-Ring improves sealing in union when minor piping misalignment is present. No more paper gaskets!

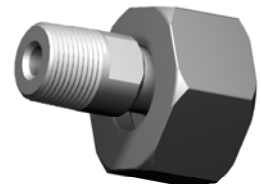
Replacement Ring size: Parker 2-116

Conventional metal to metal union is designed with one flat face and one beveled face. Tightening the union nut causes

the two halves to crush together and seal without need of a gasket. However when misalignment is present there may be inadequate compression to make a seal.

FLOATING SHANK

Vessel Connector "floats" off center by 1/8" in all directions, more than any other brand. Combined float in upper and lower valves allows for up to ±1/4" variation in vessel centers.



NAME PLATE INSTRUCTIONS

Safety ball check operation instructions etched on metal name plate and pictured on plastic yellow tag

CORROSION RESISTANT SS TRIM

Stem, ball, packing washer & follower

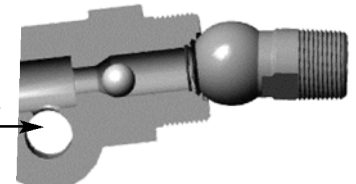
TFE STEM PACKING

Low friction turning

OPTIONAL SPHERICAL UNION

Recommended when angular misalignment of fittings causes excessive strain on piping. Especially useful on compressor packages with **VIBRATION**.

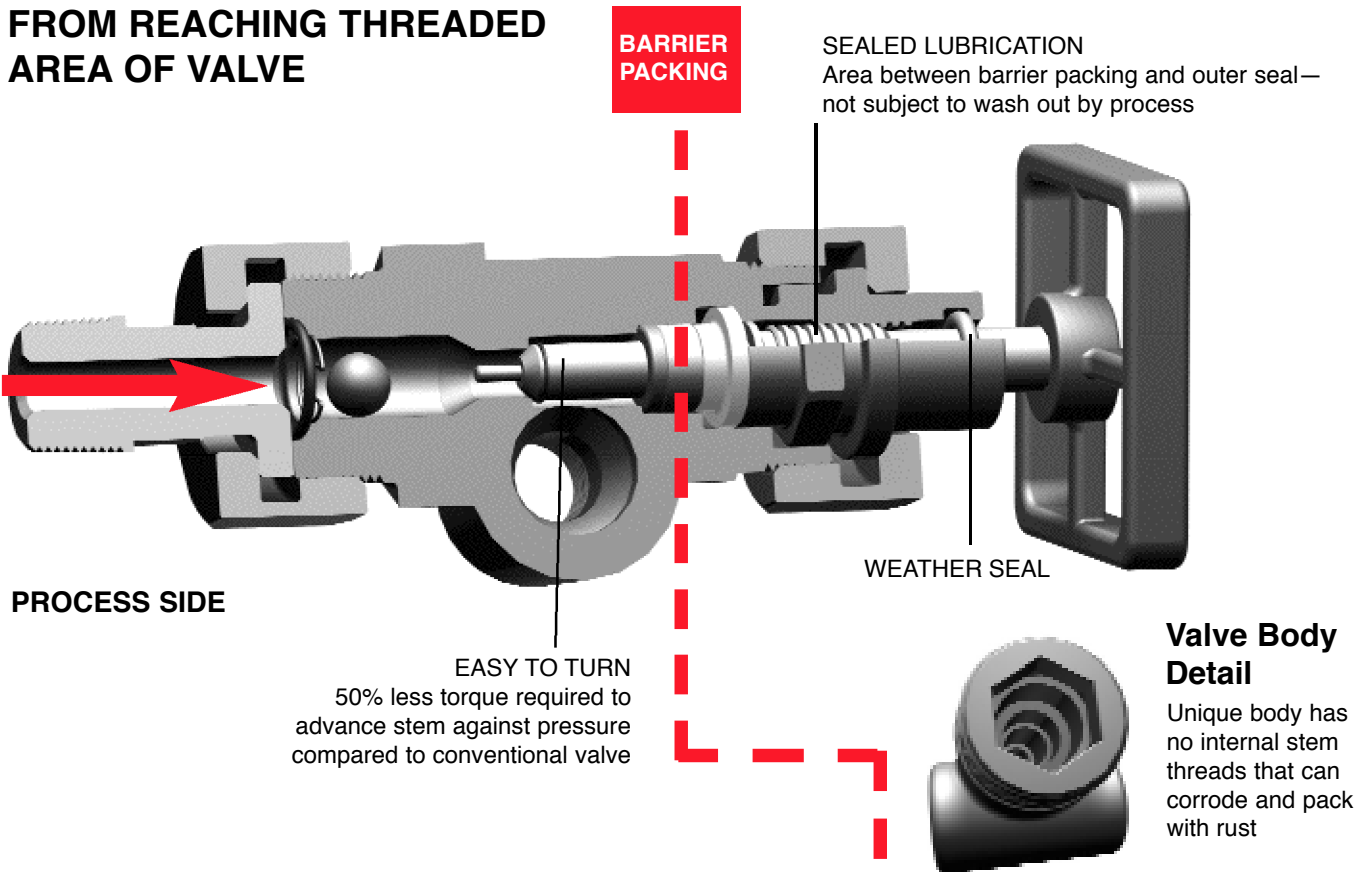
When the nipple connecting to gage lies in horizontal axis the valve can be rotated on the nipple to provide an additional degree of freedom



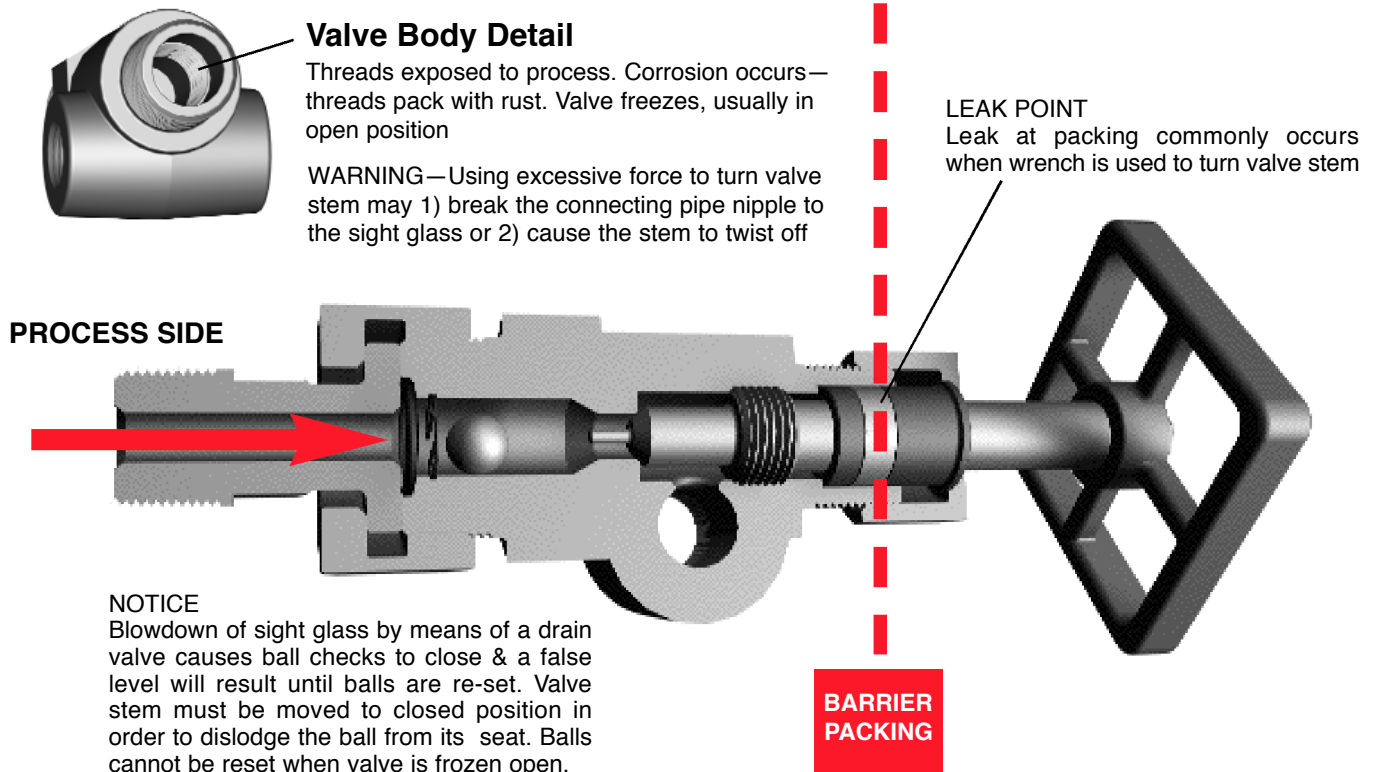
Adjustment of ball combined with rotation of valve body on the connecting nipple forms a UNIVERSAL JOINT. C-C adjustment is obtained by rotating valve body. Use "Close Hook-Up" style gages with side or back outlets or combine T's with regular top & bottom connected gages to provide this horizontal connecting axis between gage and valve body.

INFERNO “FREE TURN” DESIGN

PACKING STOPS PROCESS FROM REACHING THREADED AREA OF VALVE

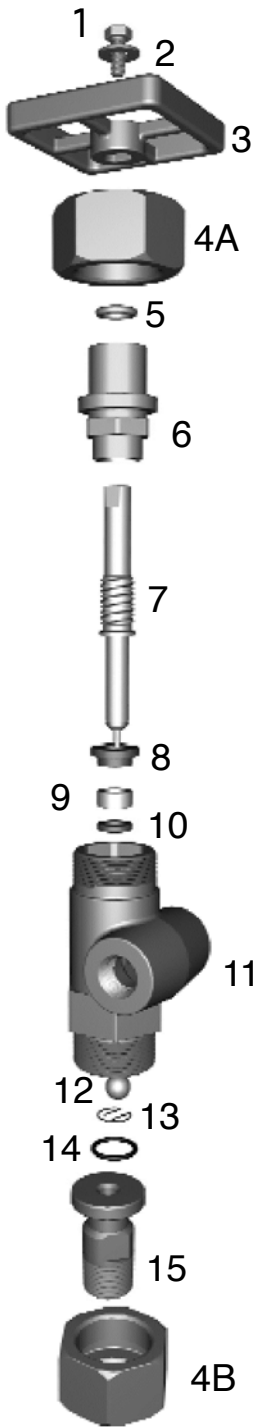


“OLD STYLE” CONVENTIONAL GAGE VALVE



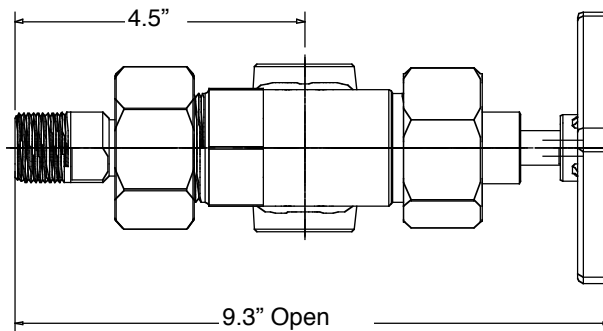
MODEL FT15 SINGLE UNION

WEIGHT: 12.5 lbs (5.7 kg) per set



ITEM	DESCRIPTION	MATERIAL—Standard	MATERIAL—Optional
1	Screw	Steel	SS
2	Washer	Steel	SS
3	Hand Wheel	Ductile Iron	
4A	Bonnet Nut	Forged Steel	T316 SS
4B	Union Nut	Forged Steel	T316 SS
5	Lube & Weather Seal	TFE	
6	Packing Bonnet	T304 SS	
7	Stem	T316 SS- TFE coated	
8	Follower	T304 SS	
9	Packing	TFE standard	Grafoil™ optional
10	Packing Washer	T316 SS	
11	Body	Forged Steel, A-105	T316 SS
12	Ball	T316 SS	
13	Snap Ring	SS	
14	O-Ring, Size 2-116	Viton™ standard	Various
15	Floating Shank	Forged Steel, A-105	T316 SS

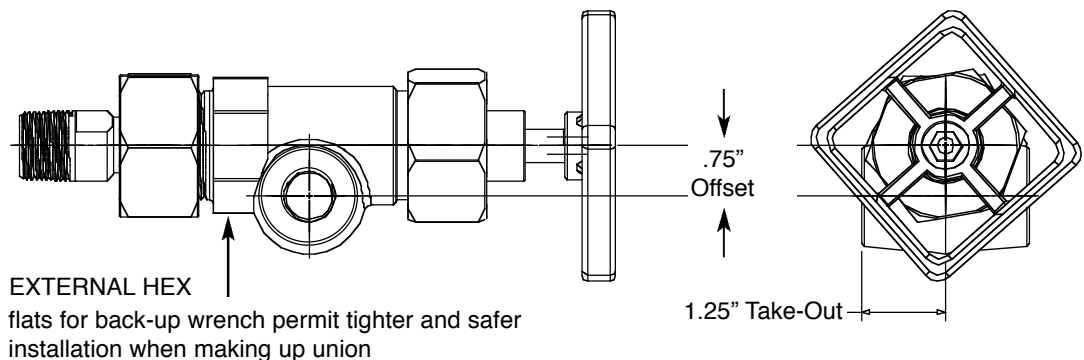
Wetted parts conform to NACE MR-01-75



TO TIGHTEN PACKING:

When tightening packing, stem travels with bonnet towards seat. In closed position, seating contact prevents further downward movement of packing bonnet.

Valve must be at least partially open before packing nut can be tightened.



PRESSURE/TEMPERATURE RANGES

Maximum working pressure, PSI

	-300°F	-50°F	-20°F	100°F	200°F	300°F	400°F	500°F	600°F	750°F
	-184°C	-46°C	-29°C	38°C	93°C	149°C	204°C	260°C	316°C	399°C
Forged Steel			4000	4000	3900	3820	3740	3500	3150	2625
Heat Treated Steel		4000	4000	4000	3900	3820	3740	3500	3150	2625
Stainless Steel	4000	4000	4000	4000	3900	3820	3740	3500	3150	2625

© 2011 Inferno Mfg. Corp. All rights reserved.



MANUFACTURING CORPORATION

115 RICOU ST • SHREVEPORT, LA 71107-6933

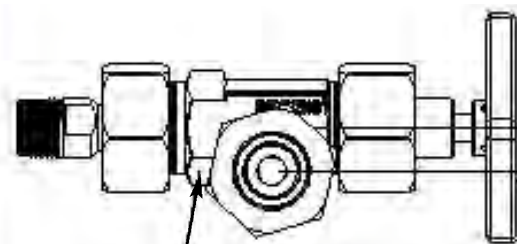
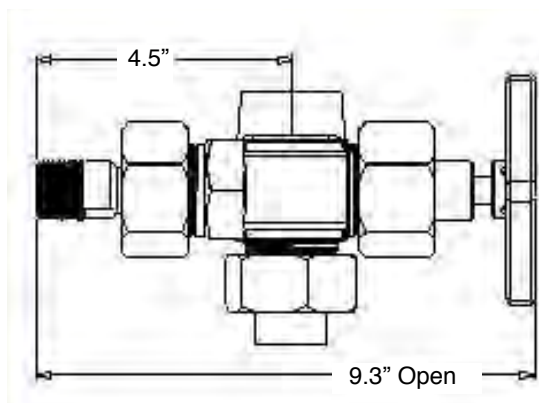
318-221-8454 • FAX 318-222-4106 • www.infernomfg.com

**PAGE
FT4**

MODEL FT25- DOUBLE UNION

Wetted parts conform to NACE MR-01-75

WEIGHT: 15.25 lbs (6.9 kg) per set

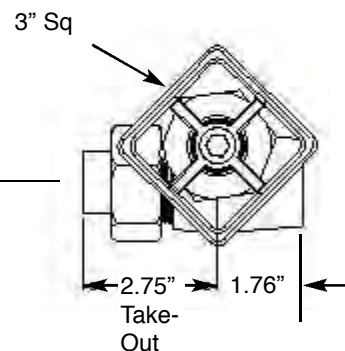


EXTERNAL HEX
flats for back-up wrench permit tighter and safer
installation when making up union

TO TIGHTEN PACKING:

When tightening packing, stem travels with bonnet towards seat. In closed position, seating contact prevents further downward movement of packing bonnet.

Valve must be at least partially open before packing nut can be tightened.



PRESSURE/TEMPERATURE RANGES

Maximum working pressure, PSI

	-300°F	-50°F	-20°F	100°F	200°F	300°F	400°F	500°F	600°F	750°F
	-184°C	-46°C	-29°C	38°C	93°C	149°C	204°C	260°C	316°C	399°C
Forged Steel			4000	4000	3900	3820	3740	3500	3150	2625
Heat Treated Steel		4000	4000	4000	3900	3820	3740	3500	3150	2625
Stainless Steel	4000	4000	4000	4000	3900	3820	3740	3500	3150	2625

Grafoil Packing Req'd

© 2011 Inferno Mfg. Corp. All rights reserved.

INFERNO

MANUFACTURING CORPORATION

115 RICOU ST • SHREVEPORT, LA 71107-6933

318-221-8454 • FAX 318-222-4106 • www.infernomfg.com

**PAGE
FT5**