

Maxseal Instrumentation Valves



IFR3
&
IFR4



- Typical Applications
- IFR3 1/4" Filter Regulator
- IFR4 1/2" Filter Regulator
- Oil & Gas Applications
- Control & Filtration of Process Media
- Pneumatic Control for Actuators, Cylinders and Positioners
- Designed for use with the Maxseal ICO3S & ICO4S Solenoid Valves

Thompson Valves Ltd

- Description
- Model IFR (Instrument Filter Regulator)
- All 316 Stainless Steel
- Filter / Regulator Combination
- High Flow Capability
- Max Inlet Pressure 20 bar
- Maintains set pressure with increasing flow
- Fully Venting
- Reliable and long life, ideal for one time installation

Technical Specifications

Materials of Construction	<input type="checkbox"/> Valve Body: Stainless Steel 316 <input type="checkbox"/> Top and Bottom Covers: Stainless Steel 316 <input type="checkbox"/> Valve Trim: Stainless Steel 316 <input type="checkbox"/> O-rings and Seals: Nitrile (NBR) <input type="checkbox"/> Diaphragm: Nitrile (NBR) <input type="checkbox"/> Seat and Adjustment Springs: Stainless Steel
Standard Filtration, Manual and Auto Drain	<input type="checkbox"/> 40 µm Stainless Steel
Relief Port	<input type="checkbox"/> 1/8" NPT Threaded Port with Bug Screen
Pressures	<input type="checkbox"/> Maximum Inlet Pressure: 20 bar <input type="checkbox"/> Outlet Pressure Ranges: 0.5 - 6 bar / 0.5 - 10 bar / 0.5 - 16 bar <input type="checkbox"/> Test (Proof) Pressure: 30 bar
Temperature Ratings	<input type="checkbox"/> Media and Ambient: -30 to +90°C
Process Connections	<input type="checkbox"/> IFR3: 1/4" NPT <input type="checkbox"/> IFR4: 1/2" NPT
Media	<input type="checkbox"/> Air and Gas
Weight	<input type="checkbox"/> IFR3: 1.8 kg <input type="checkbox"/> IFR4: 2.2 kg
ATEX Classification	<input type="checkbox"/> Exc: Complies with EN 13463 for Non-Electrical Equipment

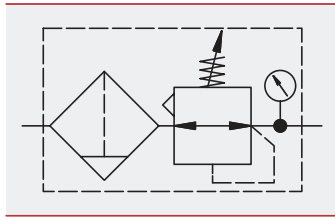
Recommendes Spares

Soft Spares	<input type="checkbox"/> Please call for details.
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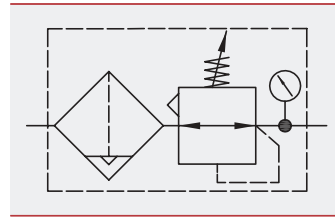
Options

Process Connections	<input type="checkbox"/> IFR3: 1/4" BSPP <input type="checkbox"/> IFR4: 1/2" BSPP
Filtration, Manual and Auto Drain	<input type="checkbox"/> 20 µm / 5 µm
Automatic Drain	<input type="checkbox"/> 1/4" (6 mm) push-fit allows easy drain away of condensate <input type="checkbox"/> Manual override <input type="checkbox"/> Pressure to close drain >0.3bar / to open drain <0.2bar <input type="checkbox"/> Regulator should be used in upright position
Mounting Bracket Kit Supplied Alone	<input type="checkbox"/> IFR3: YR20A010BS <input type="checkbox"/> IFR4: YR20A030BS
NACE	<input type="checkbox"/> NACE option available: 60°C maximum dry sour gas only MRO175-2003 and MRO103-2003

Valve Symbol



Self-relieving with gauge and manual drain

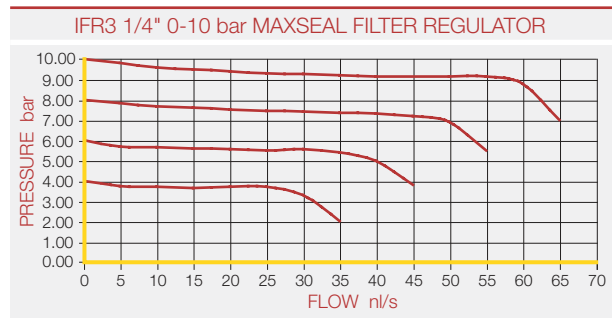


Self-relieving with gauge and automatic drain

Flow Rates (20 bar Inlet)
Pressure drop shown as a % of Outlet Flow

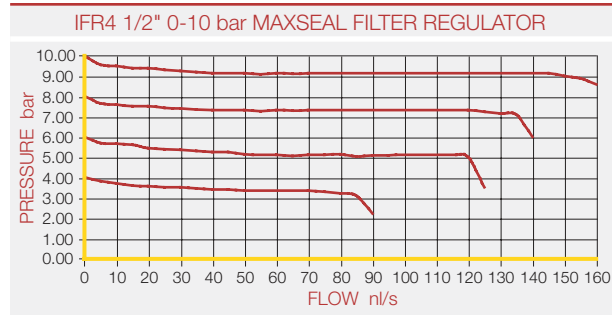
IFR3 - 0.5 - 6 bar		
Outlet (bar)	Flow (nl/s)	Pressure Drop
1	8	20%
2	25	10%
4	35	10%
6	45	10%

IFR3 - 0.5 - 16 bar		
Outlet (bar)	Flow (nl/s)	Pressure Drop
10	60	20%
12	75	10%
16	85	10%



IFR4 - 0.5 - 10 bar		
Outlet (bar)	Flow (nl/s)	Pressure Drop
2	15	20%
4	25	10%
6	35	10%
8	45	10%
10	60	10%

IFR4 - 0.5 - 10 bar		
Outlet (bar)	Flow (nl/s)	Pressure Drop
4	80	10%
6	120	10%
8	140	10%
10	160	10%



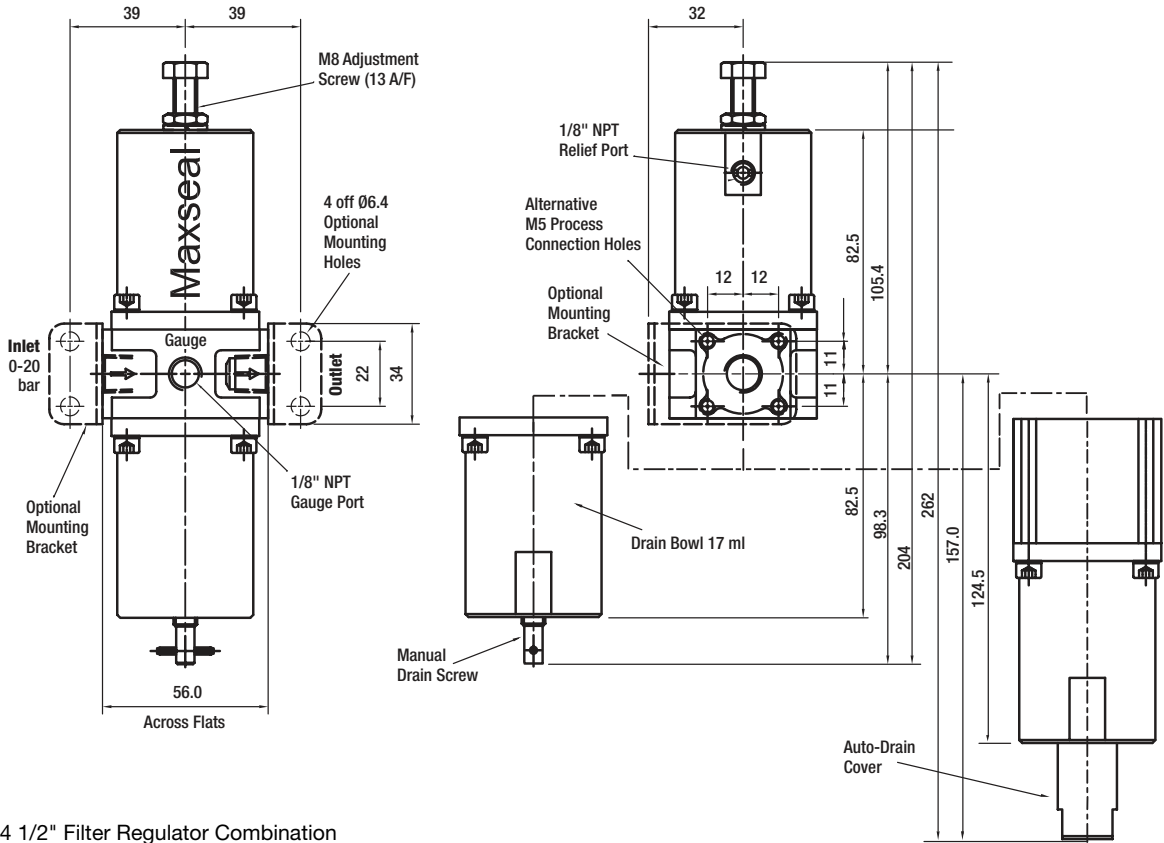
Ordering Information

Model	Inlet Pressure	Outlet Pressure	Type	Process Conn.	Seat/Seal Materials	Gauge	Mounting	Body/Trim Materials	Filtration
YR	2	A	C	A1	H	0	B	S	040
IFR3 = 1/4" IFR4 = 1/2"	0-20 bar	6 = 0.5-6 bar A = 0.5-10.0 bar B = 0.5-16.0 bar	C = Filter-Regulator Combination A = Filter-Regulator Combination with Auto-Drain	A1 = 1/4" NPT E1 = 1/4" BSPP A3 = 1/2" NPT E3 = 1/2" BSPP	H = Nitrile V = Viton® L = Low Temp. Variant	0 = None 1 = Ø50 316SS Dry Gauge 1 = Ø50 316SS Oil Filled Gauge	B = Mounting Bracket N = None	S = Stainless Steel/ 316 Stainless Steel	040 = 40-50 µm 020 = 20-30 µm 005 = 5-10 µm

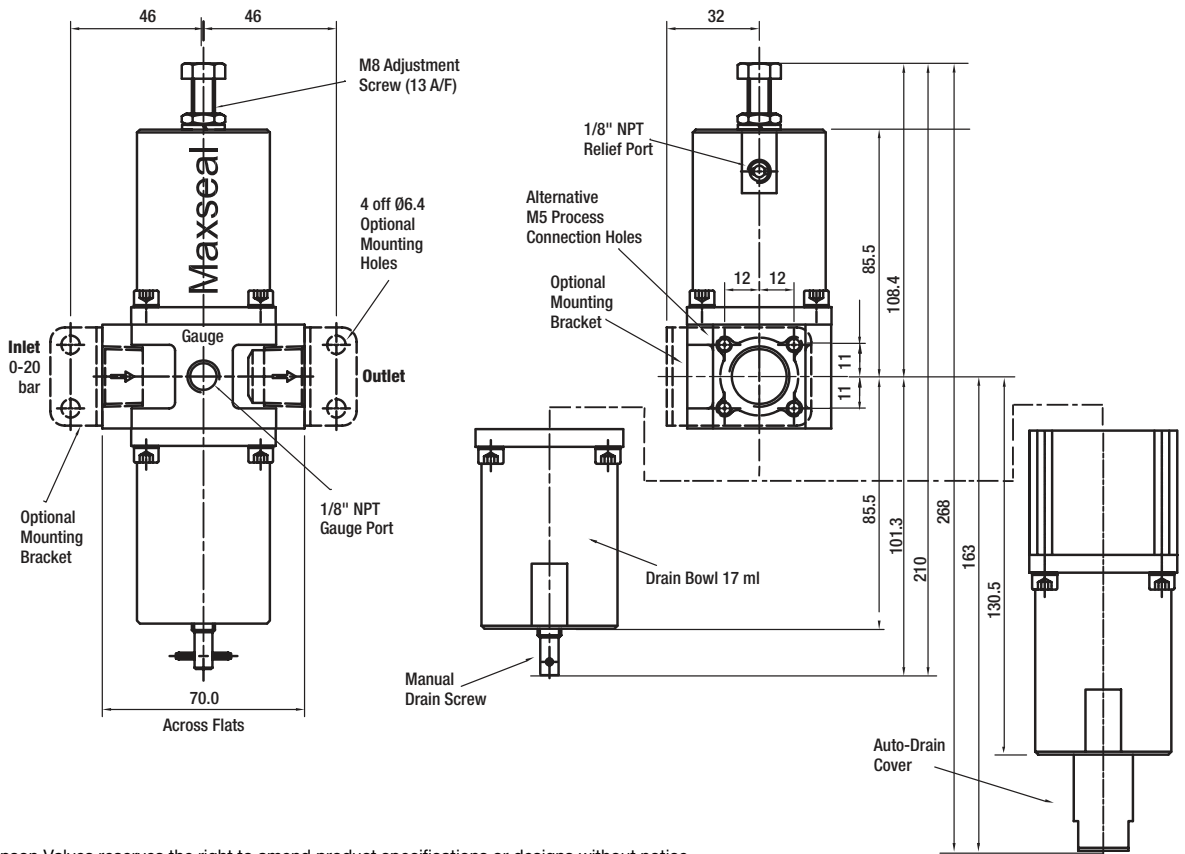
Ordering Example

YR	2	6	C	A3	H	1	B	S	020
IFR4	0-20 bar	0.5-16.0 bar	Fitl-Reg Combin.	1/2" NPT	Nitrile	Ø50 316SS Dry Gauge	Mounting Bracket	316SS/316SS	20-30 µm

IFR3 1/4" Filter Regulator Combination



IFR4 1/2" Filter Regulator Combination



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