Maxseal Instrumentation Valves

IFR3
&
IFR4



Thompson Valves Ltd

- 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

- 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

Thompson Valves Ltd - **Maxseal** Instrumentation Valves

Technical Specifications

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

Recommendes Spares

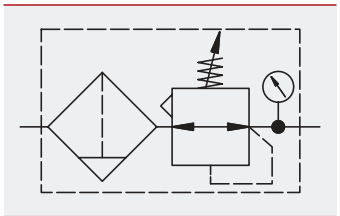
Soft Spares	Please call for details.

Options

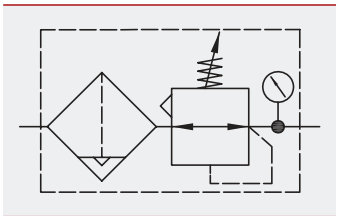
Process Connections	IFR3: 1/4" BSPP IFR4: 1/2" BSPP
Filtration, Manual and Auto Drain	20 µm / 5 µm
Automatic Drain	1/4" (6 mm) push-fit allows easy drain away of condensate Manual override Pressure to close drain >0.3bar / to open drain <0.2bar Regulator should be used in upright position
Mounting Bracket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

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Valve Symbol



Self-relieving with gauge and manual drain



Self-relieving with gauge and automatic drain

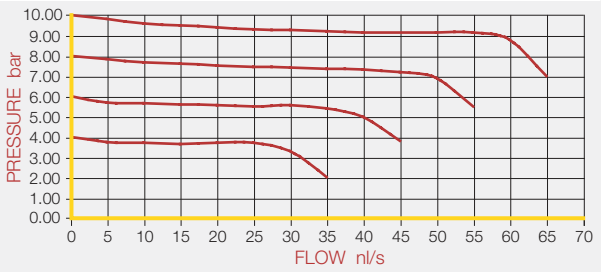
Flow Rates (20 bar Inlet)

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%

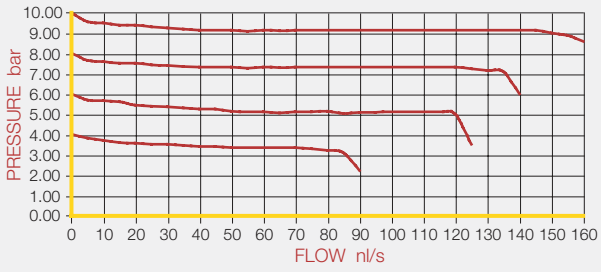
IFR3 1/4" 0-10 bar MAXSEAL FILTER REGULATOR



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%

IFR4 1/2" 0-10 bar MAXSEAL FILTER REGULATOR



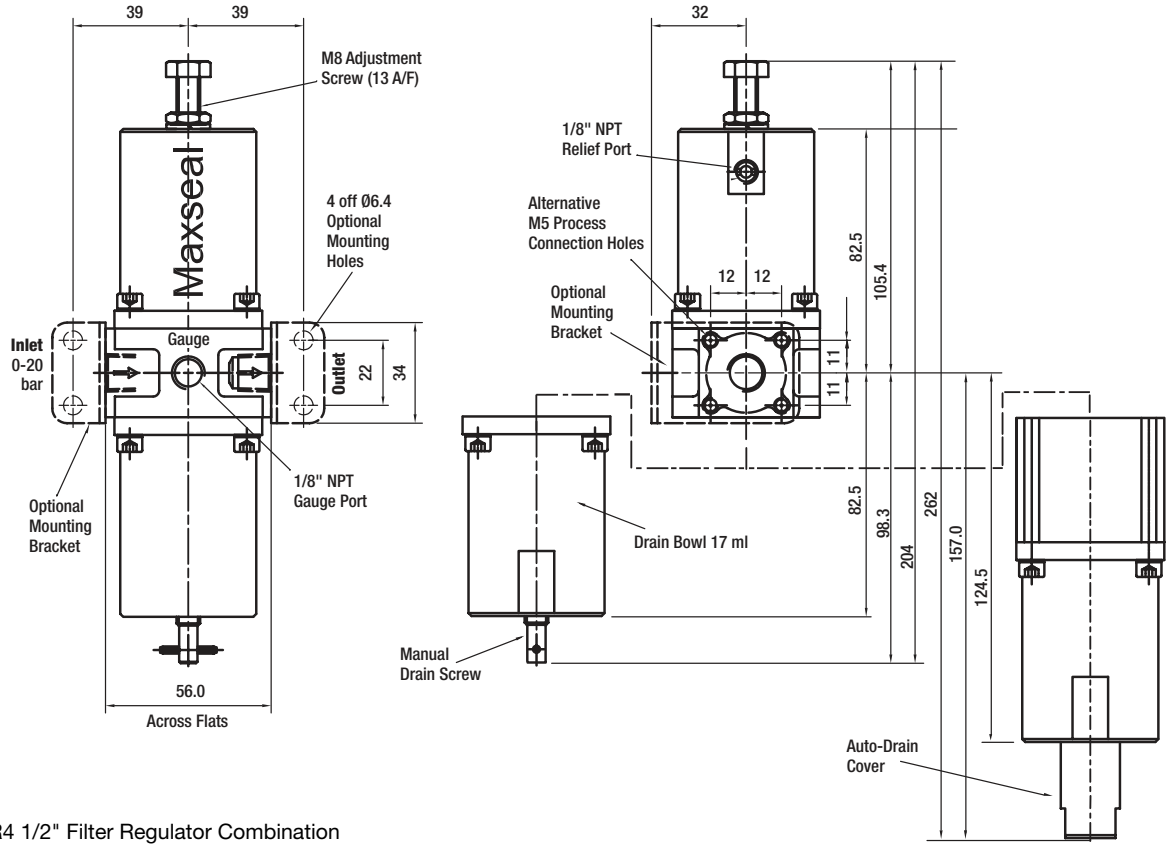
Ordering Information

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 = 316 Stainless Steel/ 316 Stainless Steel	040 = 40-50 µm 020 = 20-30 µm 005 = 5-10 µm

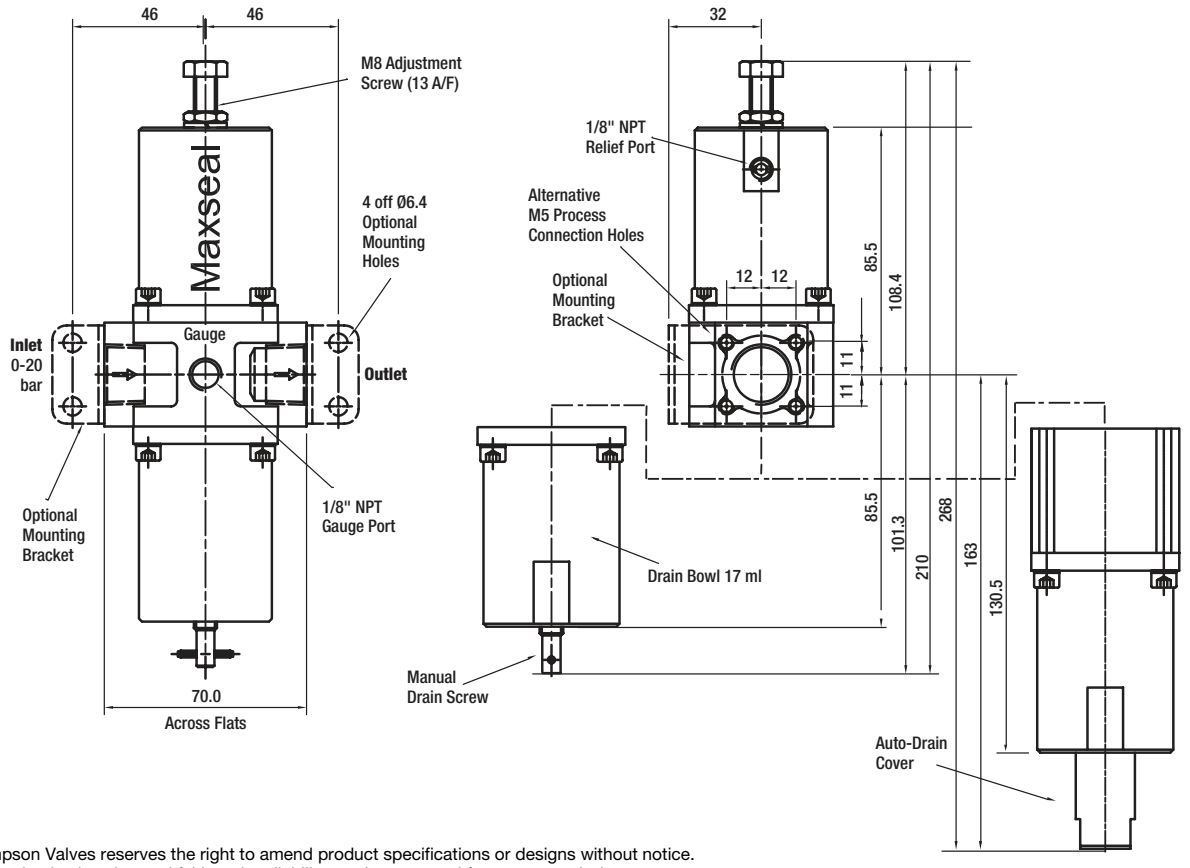
Ordering Example

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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