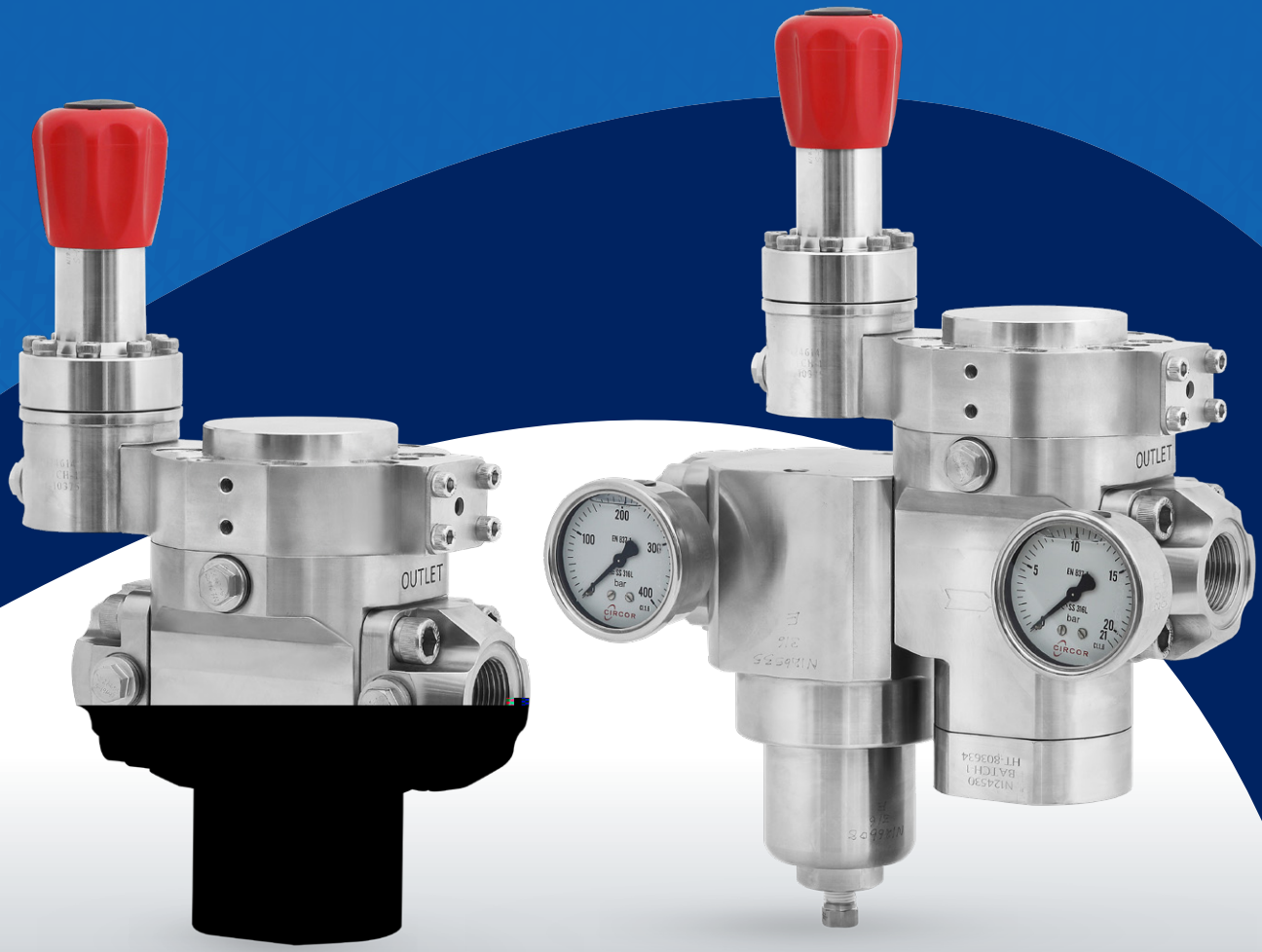
CIRCOR | HALE HAMILTON

DR & DFR SERIES

Dome Regulators &
Dome Filter Regulators
1" & 1 1/2" (DN25, DN40)



YOUR CREATIVE ENGINEERING PARTNER

DR & DFR SERIES

Dome Regulators & Dome Filter Regulators 1" & 1 1/2" (DN25, DN40)

Series D(F)R provides a fully configurable Dome Regulator/ Dome Filter Regulator product offering performance optimised for your application.

This product enables pressure control solutions to be configured and provided as a fully tested solution.

For Over-Pressure Protection solutions, see our Slam Shut Valve range.

DR – Dome Regulator **DFR – Dome Filter Regulator**

HIGHLIGHTS

- No client engineering required to set-up all functions delivered in one assembly
- Inlet Filter protects pilot, main regulator and downstream components.
- Dynamic Piloting offers improved delivery pressure accuracy.
- External Feedback further improves delivery pressure accuracy. Fail Safe In-field repairs made easy with fully tested replacement assemblies for main valve seat, filters and pilot regulators.

IDEAL USES

- Test Systems including those requiring a fast response during start up and shut down.
- H2/CNG/Biomethane Systems (in conjunction with our Slam Shut Valves for full pressure safety on flammable gas systems).
- Trailer Decanting (especially where high flow is required, even at low trailer pressure).
- HP Air Systems (Maritime, Industrial).

IN: 420 barg (6000 psig)

OUT: 0-250 barg (0 - 3625 psig)

Cv 2-12

CIRCOR | HALE HAMILTON

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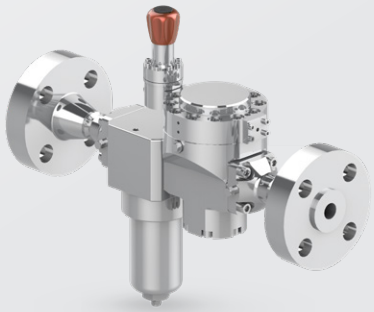
FEATURED PRODUCTS

DR Regulator

DFR Filter Regulator

DR Regulator Dynamically Piloted

DFR Filter Regulator With Threaded Ports



DFR Filter Regulator With Flanges

FEATURES AND SPECIFICATIONS

1. Piloting Options

> SRH6 High Pressure Pilot Regulator (as shown) provides improved performance dynamic piloting over a wide range of control pressures.

> Additional options include: 'SRL15' High Accuracy Pilot Regulator provides excellent pressure control accuracy for delivery and 'Closed Dome' charged via a needle valve block (used for applications where pressure control is less critical). Performance below 20 barg.

2. Inlet/Outlet Flange Adaptors

Available in ISO, NPT, Weld Stub/Socket to suit your pipe or an EN/ASME flange (bolted to the main regulator).

Note: See Hale Hamilton's fully welded regulator Data Sheet for a fully welded flanged body solution.

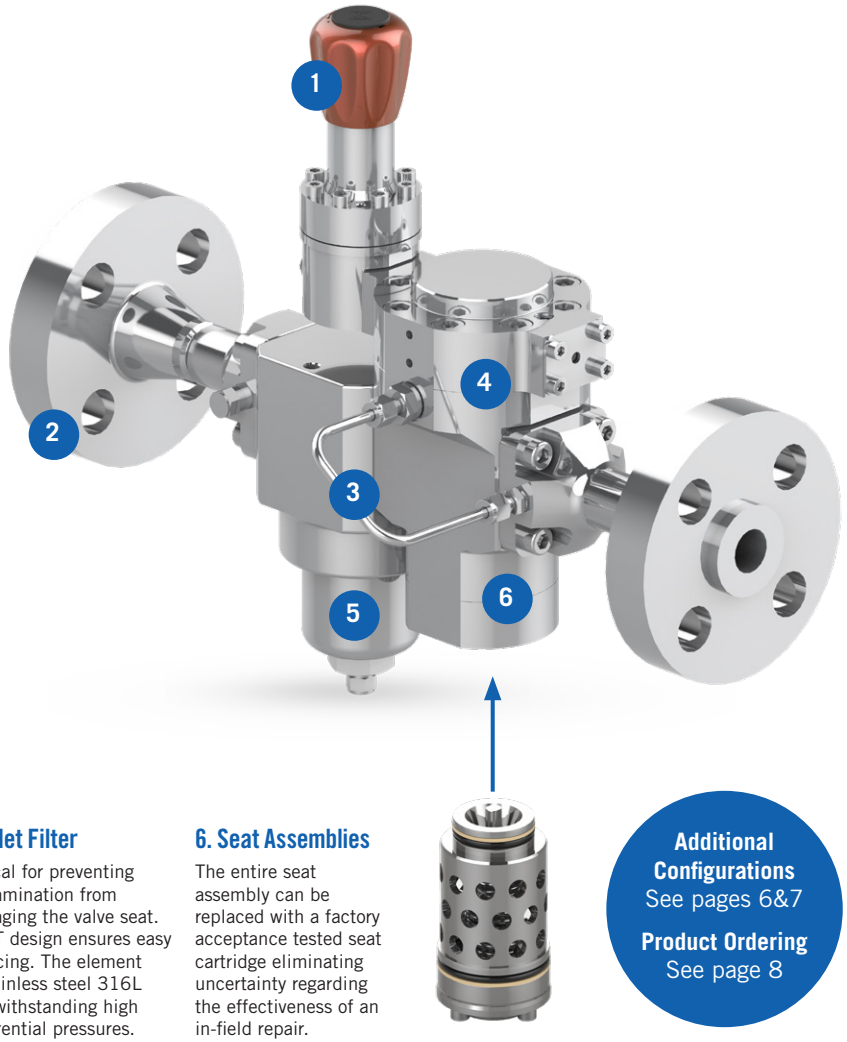
3. External Feedback Options

> Via connection to pilot regulator (high sensitivity option).

> Via connection direct to main regulator (improved performance & higher flow).

4. Large Diaphragm

Large Diaphragm provides a high degree of sensitivity for excellent pressure control and high degree of stability under large pressure drops.



5. Inlet Filter

Critical for preventing contamination from damaging the valve seat. The T design ensures easy servicing. The element is stainless steel 316L and withstanding high differential pressures.

6. Seat Assemblies

The entire seat assembly can be replaced with a factory acceptance tested seat cartridge eliminating uncertainty regarding the effectiveness of an in-field repair.

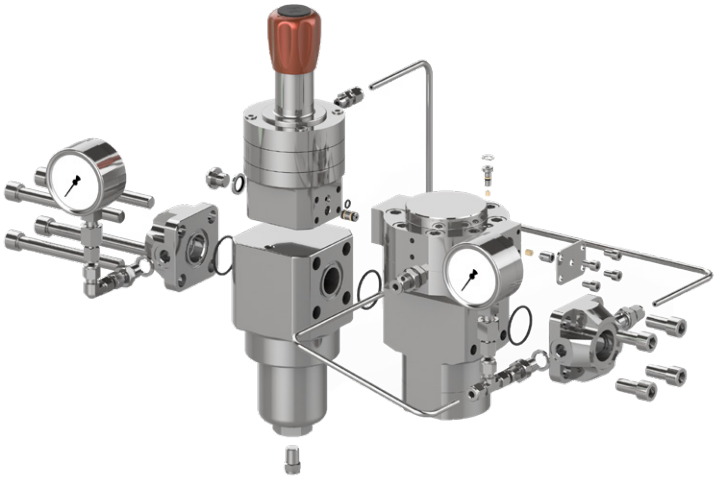
Additional Configurations
See pages 6&7

Product Ordering
See page 8

PRODUCT SPECIFICATION DATA

Series D(F)R	D(F)RH25	D(F)RH40
Inlet Pressure	420 barg (6000 psig)	
Regulator Cv	2, 3.4, 5	9, 12
Outlet Pressure (Dome Regulator Rating)	250 barg (3625 psig)	
Pilot Regulator Setting Ranges (SRH6)	0 – 250 barg (0 – 3625 psig) 0 – 150 barg (0 – 2175 psig) 0 – 100 barg (0 – 1450 psig) 0 – 25 barg (0 – 363 psig)	
Pilot Regulator Setting Ranges (SRL6)	0 – 20 barg (0 – 290 psig) 0 – 10 barg (0 – 145 psig)	
Filtration (microns)	10 & 20	
Service Temperature Range (HNBR – Standard Option)	-40°C to +80°C	
Service Temperature Range (FPM)	-20°C to +150°C	
Service Temperature Range (EPDM)	-20°C to +150°C	
Seat and Outboard Leakage (standard)	Bubble Tight	
Body / Dome Material	Stainless Steel 316L	
He Mass VV Leak Test – Seat / Outboard (Option at Extra Cost)	He leak testing available at additional costs. Please contact **sales@halehamilton.com** for additional information	

FEATURES AND SPECIFICATIONS



Required Information
When placing an enquiry, please advise the following:
> Inlet Pressure Range
> Outlet Pressure Range
> Flow Rate Range
> Fluid Temperature Range
> Ambient Temperature Range
> Fluid Type
> Connections Required (if threaded or flanges) or Pipe Sizes and Material (if welded connections required)
> Application Details – Tell us what you're trying to achieve. Including any special requirements.

SRH6
PILOT REGULATOR

> Control Range:
(0 – 250 barg/0 – 3625 psig)

> Dynamic Piloting provides a stable outlet pressure, irrespective of ambient temperature changes.

SRL15
HIGH ACCURACY PILOT REGULATOR

> Control Range:
(0 – 20 barg/0 – 290 psig)

> High Accuracy

> Dynamic Piloting

> External Sensing provides almost zero droop in outlet pressure across flow range.

Feature	Considerations
Regulator Size (DN) and Seat Size	> Consult HH sales for optimal set-up for your process conditions. The questions in the 'Required Information' section will make it easier for HH to specify the optimal solution. > Consult HH sales for default flow (failure flow) rates required to size downstream safety valves.
Filter	Fitting a filter direct to the regulator is a fail safe way of ensuring the regulator will continue to work well, regardless of how clean the upstream system is. Most new installations have some level of contamination regardless of how well the pipes have been flushed. Particularly for high inlet pressure applications, filters are a must.
Needle Valve Block for Dome Charging	This feature allows the dome to be charged internally within the regulator. The expected performance is illustrated later in this Data Sheet (see 'Selecting The Right Piloting Option' section). This is a good option where accuracy and adjustability are not a priority for regulator selection.
SRH6 – High Pressure Pilot Regulator	The SRH6 (Spring Regulator, High Pressure, DN6 - 1/4"), used with dynamic piloting, provides an easy way to set & adjust set pressure. It ensures delivery pressure is stable regardless of variations in ambient temperature. It mounts direct to the Dome regulator minimising leak paths and ensuring the client avoids the applications engineering usually required to attach a pilot regulator.
SRL15 – High Accuracy, Low Pressure Pilot Regulator.	The SRL15 (Spring Regulator, Low Pressure, DN6) is used in applications where delivery pressure accuracy is critical. This feature is often used with external sensing where the regulator takes feedback for the piping downstream of the regulator and drives the main Dome regulator to deliver less droop under flow (i.e. a pressure very close to the original set pressure).
Gauges (in/out)	All flange adaptors (inlet and outlet) have a pressure tapping allowing the connection of a centre back gauge.
Pipe Fittings (Inlet/Outlet)	The D(F)R Series comes with flanges installed to suit your installation. The interface on the flange can be threaded, a weld stub or a DIN/ASME flange. In all cases for this range, the flange bolts to the regulator body and seals on an o-ring.
Fully Welded ASME/DIN Flanged Assemblies	Versions of our Tee Filters and DR Series Regulators with DIN/AMSE flanges welded to the body are detailed on page 7.
Special Features	Special features such as alternative materials, non-standard pipe interfaces, alternative temperature ranges, etc. can be provided. Please contact 'sales@halehamilton.com'

TYPICAL CONFIGURATIONS

DR25
Regulator (Closed Dome)

> Inlet 420 barg (6000 psig)
> Outlet Range:
(0 – 250 barg/0 – 3625 psig)
> Outlet pressure set by charging dome via needle valves.

DFR25
Filter Regulator (Closed Dome)

> Inlet 420 barg (6000 psig)
> Outlet Pressure Range
(0 – 250 barg/0 – 3625 psig)
> Filter Protects Dome Regulator Seat
> Outlet pressure set via needle valves.

DR25
Regulator (Piloted)

> Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Dynamic Piloting provides improved delivery pressure.

DFR25
Filter Regulator (Piloted)

> Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Filter Protects Pilot & Dome Regulator Seats
> Dynamic Piloting provides improved delivery pressure.

DR25
Piloted with External Sensing

> Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Dynamic Piloting with feedback provides improved delivery pressure.

DFR25
Piloted with Filter and Gauges

> Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Filter Protects Pilot & Main Regulator Seats
> Dynamic Piloting provides improved delivery pressure
> Inlet & Outlet pressure indication Regulator Seats.

DFR25
Piloted with 2" Enlarged Outlet Connection

> 1" Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Filter Protects Pilot & Dome Regulator Seats
> Dynamic Piloting with feedback to body provides improved delivery pressure with significantly reduced droop.

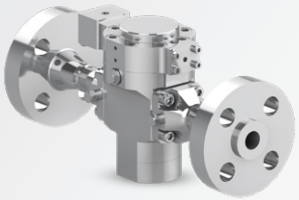
DR40
Piloted with 3" Enlarged Outlet Connection

> 1.5" Inlet 420 barg (6000 psig)
> High Accuracy, Low Pressure Pilot provides excellent pressure control
> Dynamic Piloting with feedback to Pilot Regulator provides the most accurate delivery pressure with significantly reduced droop.

DFR40
Remotely Piloted with a SRH6 Spring Loaded Regulator

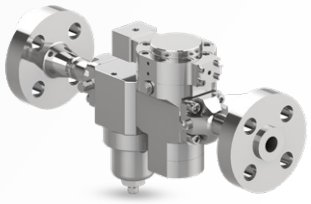
> Dynamic Piloting for stable set pressure (gas flows through dome to outlet)
> SRH6 mounted remotely for set point adjustment away from the process
> SRH6 can be panel mounted
> Outlet Range: 0 - 250 barg
(0 - 2900 psig).

TYPICAL CONFIGURATIONS



DR25
Regulator (Closed Dome)

> Inlet 420 barg (6000 psig)
> Outlet Range:
(0 – 250 barg/0 – 3625 psig)
> Outlet pressure set by charging dome via needle valves
> Typical Ordering Code:
D-F-RH-25-E11-E11-4-H-K-N-RF

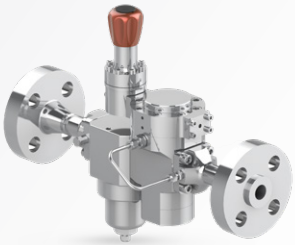


DFR25
Filter Regulator

> Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Dynamic Piloting provides improved delivery pressure
> Typical Ordering Code:
D-F-RH-25-E11-E11-4-10-H-K-N-RF

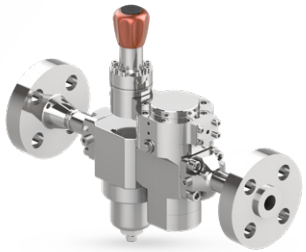
DFR25
Piloted with SRH6 & External Sensing

> Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Dynamic Piloting with feedback to body provides improved delivery pressure with significantly reduced droop
> Typical Ordering Code:
D-F-RH-25-E11-E11-4-H-K-3-B-RF



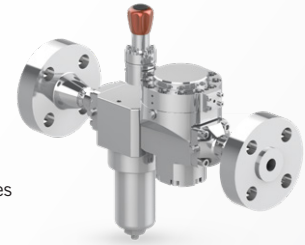
DFR25
Filter Regulator, Piloted with SRH6 & External Sensing

> Inlet 420 barg (6000 psig)
> Outlet Pressure Range
(0 – 250 barg/0 – 3625 psig)
> Filter Protects Dome Regulator Seat
> Outlet pressure set via needle valves
> Typical Ordering Code:
D-F-RH-25-A11-A11-4-10-H-K-2-B-RF



DR25
Filter Regulator, Piloted with SRH6

> Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 250 barg/0 – 3625 psig)
> Dynamic Piloting with feedback provides improved delivery
> Typical Ordering Code:
D-F-RH-25-E11-E11-4-10-H-K-1-RF



DR40
Filter Regulator, Piloted with SRH6

> 1.5” Inlet 420 barg (6000 psig)
> High Pressure Pilot
(0 – 20 barg/0 – 290 psig)
> High Accuracy Pilot provides excellent pressure control
> Dynamic Piloting with feedback to Pilot Regulator provides the most accurate delivery pressure with significantly reduced droop
> Typical Ordering Code:
D-F-RH-40-A11-A11-12-20-H-K-1-RF

PRODUCT ORDERING CODES

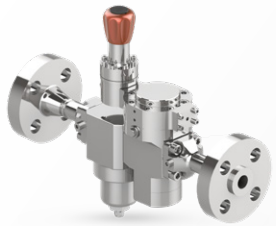
Your DR/DFR Pressure Control Assemblies can be selected in full using the ordering system set out below.

Alternatively, you can contact Hale Hamilton sales at **sales@halehamilton.com** with information on fluid type, pressures, flow rates, fluid temperatures and the application and we'll be happy to advise you.

As an example, the below configuration is highlighted in **blue text** on the table below.

Flanged Filter Regulator

D-F-RH-25-E11-E11-4-10-H-K-1-RF



D	F	RH	25	E11	E11	4	10	H	K	1					RTJ
Type	**Filter**	**Pressure Category**	**Series (Nominal Size)**	**Port Type (Inlet)**	**Port Type (Outlet)**	**CV**	**Micron Rating**	**Elastomer Type**	**Drh, Sr Seat Material**	**Loading Option**	**External Feedback**	**Inlet Gauge**	**Outlet Gauge**	**Special Cleaning**	**Special Feature**
Mandatory	Omit If Not Used	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Omit If Not Used	Mandatory	Mandatory	Mandatory	Omit If Not Used	Mandatory	Mandatory	Omit If Not Used	Omit If Not Used
'D'	**'F' Filter**	**'RH' High Pressure (420 barg)**	**'25' (1" / DN25)**	'1' ISO G	'1' ISO G	'2' 2	**'10' 10 Micron**	**'H' HNBR**	**'K' PCTFE**	'N' Needle Valve Block	'P' Feedback to Pilot Regulator	'X' None	'X' None	'1' Oxygen Clean	'XX' Special Features (alternative materials, etc. New codes allocated on client request)
			'40' (1 1/2" / DN40)	'2' NPT	'2' NPT	**'4'** 3.4	'20' 20 Micron	'F' FKM (Viton) *	'P' PEEK *	**'1' Pilot Regulator, SRH6 0-22 barg**	'B' Sensed from Regulator Body	'1' 0-50 barg (0-725 psig)	'1' 0-5 barg (0-73 psig)	'2' Breathing Air Service	**'RTJ' RTJ Flange Facing**
				'WXX' Weld Stub. Please refer to table on page 9 for code	'WXX' Weld Stub. Please refer to table on page 9 for code	'5' 5		'E' EPDM *		'2' Pilot Regulator, SRH6 0-105 barg		'2' 0-100 barg (0-1450 psig)	'2' 0-10 barg (0-145 psig)		'RF' Raised Face Facing
				'EXX' EN Flange. Please specify type required	**'EXX' EN Flange. Please specify type required**	'9' 9				'3' Pilot Regulator, SRH6 0-135 barg		'3' 0-200 barg (0-2900 psig)	'3' 0-20 barg (0-290 psig)		
				'AXX' ASME Flange. Please specify type required	'AXX' ASME Flange. Please specify type required	'12' 12				'4' Pilot Regulator, SRH6 0-250 barg		'4' 0-400 barg (0-5800 psig)	'4' 0-50 barg (0-725 psig)		
										'5' Pilot Regulator - High Sensitivity, SRL15 0-9 barg		'5' 0-500 barg (0-7250 psig)	'5' 0-100 barg (0-1450 psig)		
										'6' Pilot Regulator - High Sensitivity, SRL15 0-20 barg			'6' 0-200 barg (0-2900 psig)		
										'X' Without loading feature fitted (internal orders only)			'7' 0-400 barg (0-5800 psig)		

Note:

Options marked with an asterisk symbol '*' indicate configurations that may incur additional costs / lead time.

WELD STUB OPTIONS

DR25 TYPES
Flange Options

Note:

Fit External Feedback to the DR25 for pipe sizes above DN25 (1") for optimal performance (20 barg max).

Code	Inlet Pipe	Code	Outlet Pipe
W01	DN15 (1/2") Sch5	W01	DN15 (1/2") Sch5
W02	DN15 (1/2") Sch10	W02	DN15 (1/2") Sch10
W03	DN15 (1/2") Sch40	W03	DN15 (1/2") Sch40
W04	DN15 (1/2") Sch80	W04	DN15 (1/2") Sch80
W05	DN15 (1/2") Sch160	W05	DN15 (1/2") Sch160
W06	DN20 (3/4") Sch5	W06	DN20 (3/4") Sch5
W07	DN20 (3/4") Sch10	W07	DN20 (3/4") Sch10
W08	DN20 (3/4") Sch40	W08	DN20 (3/4") Sch40
W09	DN20 (3/4") Sch80	W09	DN20 (3/4") Sch80
W10	DN20 (3/4") Sch160	W10	DN20 (3/4") Sch160
W11	DN25 (1") Sch5	W11	DN25 (1") Sch5
W12	DN25 (1") Sch10	W12	DN25 (1") Sch10
W13	DN25 (1") Sch40	W13	DN25 (1") Sch40
W14	DN25 (1") Sch80	W14	DN25 (1") Sch80
W15	DN25 (1") Sch160	W15	DN25 (1") Sch160
W16	DN25 (1") SchXXS	W16	DN25 (1") SchXXS
W17	DN32 (1 1/4") Sch5	W17	DN32 (1 1/4") Sch5
W18	DN32 (1 1/4") Sch10	W18	DN32 (1 1/4") Sch10
W19	DN32 (1 1/4") Sch40	W19	DN32 (1 1/4") Sch40
W20	DN32 (1 1/4") Sch80	W20	DN32 (1 1/4") Sch80
W21	DN32 (1 1/4") Sch160	W21	DN32 (1 1/4") Sch160
W22	DN32 (1 1/4") SchXXS	W22	DN32 (1 1/4") SchXXS
		W23	DN40 (1 1/2") Sch5
		W24	DN40 (1 1/2") Sch10
		W25	DN40 (1 1/2") Sch40
		W26	DN40 (1 1/2") Sch80
		W27	DN40 (1 1/2") Sch160
		W28	DN40 (1 1/2") SchXXS
		W29	DN50 (2") Sch5
		W30	DN50 (2") Sch10
		W31	DN50 (2") Sch40
		W32	DN50 (2") Sch80
		W33	DN50 (2") Sch160
		W34	DN50 (2") SchXXS

DR40 TYPES
Flange Options

Note:

Fit External Feedback to the DR40 for pipe sizes above DN40 (1 1/2") for optimal performance (20 barg max).

External Feedback is recommended for delivery pressures <20 barg.

External Feedback reduces droop as flow increases (see page 8).

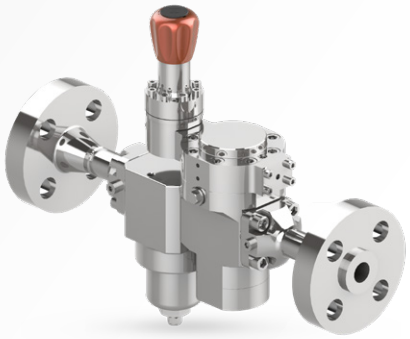
Code	Inlet Pipe	Code	Outlet Pipe
W01	DN32 (1 1/4") Sch5	W01	DN32 (1 1/4") Sch5
W02	DN32 (1 1/4") Sch10	W02	DN32 (1 1/4") Sch10
W03	DN32 (1 1/4") Sch40	W03	DN32 (1 1/4") Sch40
W04	DN32 (1 1/4") Sch80	W04	DN32 (1 1/4") Sch80
W05	DN32 (1 1/4") Sch160	W05	DN32 (1 1/4") Sch160
W06	DN32 (1 1/4") SchXXS	W06	DN32 (1 1/4") SchXXS
W07	DN40 (1 1/2") Sch5	W07	DN40 (1 1/2") Sch5
W08	DN40 (1 1/2") Sch10	W08	DN40 (1 1/2") Sch10
W09	DN40 (1 1/2") Sch40	W09	DN40 (1 1/2") Sch40
W10	DN40 (1 1/2") Sch80	W10	DN40 (1 1/2") Sch80
W11	DN40 (1 1/2") Sch160	W11	DN40 (1 1/2") Sch160
W12	DN40 (1 1/2") SchXXS	W12	DN40 (1 1/2") SchXXS
W13	DN50 (2") Sch5	W13	DN50 (2") Sch5
W14	DN50 (2") Sch10	W14	DN50 (2") Sch10
W15	DN50 (2") Sch40	W15	DN50 (2") Sch40
W16	DN50 (2") Sch80	W16	DN50 (2") Sch80
W17	DN50 (2") Sch160	W17	DN50 (2") Sch160
W18	DN50 (2") SchXXS	W18	DN50 (2") SchXXS
		W19	DN65 (2 1/2") Sch5
		W20	DN65 (2 1/2") Sch10
		W21	DN65 (2 1/2") Sch40
		W22	DN65 (2 1/2") Sch80
		W23	DN65 (2 1/2") Sch160
		W24	DN65 (2 1/2") SchXXS
		W25	DN80 (3") Sch5
		W26	DN80 (3") Sch10
		W27	DN80 (3") Sch40
		W28	DN80 (3") Sch80
		W29	DN80 (3") Sch160
		W30	DN80 (3") SchXXS

FLANGE CONNECTIONS

ASME

Flange Interface Options

Code	Inlet Pipe	Code	Outlet Pipe
A01	DN15 (1/2") Class 150	A01	DN15 (1/2") #150
A02	DN15 (1/2") #300	A02	DN15 (1/2") #300
A03	DN15 (1/2") #600	A03	DN15 (1/2") #600
A04	DN15 (1/2") #1500	A04	DN15 (1/2") #1500
A05	DN15 (1/2") #2500	A05	DN15 (1/2") #2500
A06	DN20 (3/4") #150	A06	DN20 (3/4") #150
A07	DN20 (3/4") #300	A07	DN20 (3/4") #300
A08	DN20 (3/4") #600	A08	DN20 (3/4") #600
A09	DN20 (3/4") #1500	A09	DN20 (3/4") #1500
A10	DN20 (3/4") #2500	A10	DN20 (3/4") #2500
A11	DN25 (1") #150	A11	DN25 (1") #150
A12	DN25 (1") #300	A12	DN25 (1") #300
A13	DN25 (1") #600	A13	DN25 (1") #600
A14	DN25 (1") #900	A14	DN25 (1") #900
A15	DN25 (1") #1500	A15	DN25 (1") #1500
A16	DN25 (1") #2500	A16	DN25 (1") #2500
A17	DN32 (1 1/4") #150	A17	DN32 (1 1/4") #150
A18	DN32 (1 1/4") #300	A18	DN32 (1 1/4") #300
A19	DN32 (1 1/4") #600	A19	DN32 (1 1/4") #600
A20	DN32 (1 1/4") #900	A20	DN32 (1 1/4") #900
A21	DN32 (1 1/4") #1500	A21	DN32 (1 1/4") #1500
A22	DN32 (1 1/4") #2500	A22	DN32 (1 1/4") #2500
		A23	DN40 (1 1/2") #150
		A24	DN40 (1 1/2") #300
		A25	DN40 (1 1/2") #600
		A26	DN40 (1 1/2") #900
		A27	DN40 (1 1/2") #1500
		A28	DN40 (1 1/2") #2500
		A29	DN50 (2") #150
		A30	DN50 (2") #300
		A31	DN50 (2") #600
		A32	DN50 (2") #900
		A33	DN50 (2") #1500
		A34	DN50 (2") #2500



EN

Flange Interface Options

Code	Inlet Pipe	Code	Outlet Pipe
E01	DN15 (1/2") PN16	E01	DN15 (1/2") PN16
E02	DN15 (1/2") PN40	E02	DN15 (1/2") PN40
E03	DN15 (1/2") PN100	E03	DN15 (1/2") PN100
E04	DN15 (1/2") PN250	E04	DN15 (1/2") PN250
E05	DN15 (1/2") PN400	E05	DN15 (1/2") PN400
E06	DN20 (3/4") PN16	E06	DN20 (3/4") PN16
E07	DN20 (3/4") PN40	E07	DN20 (3/4") PN40
E08	DN20 (3/4") PN100	E08	DN20 (3/4") PN100
E09	DN20 (3/4") PN250	E09	DN20 (3/4") PN250
E10	DN20 (3/4") PN400	E10	DN20 (3/4") PN400
E11	DN25 (1") PN16	E11	DN25 (1") PN16
E12	DN25 (1") PN40	E12	DN25 (1") PN40
E13	DN25 (1") PN100	E13	DN25 (1") PN100
E14	DN25 (1") PN160	E14	DN25 (1") PN160
E15	DN25 (1") PN250	E15	DN25 (1") PN250
E16	DN25 (1") PN400	E16	DN25 (1") PN400
E17	DN32 (1 1/4") PN16	E17	DN32 (1 1/4") PN16
E18	DN32 (1 1/4") PN40	E18	DN32 (1 1/4") PN40
E19	DN32 (1 1/4") PN100	E19	DN32 (1 1/4") PN100
E20	DN32 (1 1/4") PN160	E20	DN32 (1 1/4") PN160
E21	DN32 (1 1/4") PN250	E21	DN32 (1 1/4") PN250
E22	DN32 (1 1/4") PN400	E22	DN32 (1 1/4") PN400
		E23	DN40 (1 1/2") PN16
		E24	DN40 (1 1/2") PN40
		E25	DN40 (1 1/2") PN100
		E26	DN40 (1 1/2") PN160
		E27	DN40 (1 1/2") PN250
		E28	DN40 (1 1/2") PN400
		E29	DN50 (2") PN16
		E30	DN50 (2") PN40
		E31	DN50 (2") PN100
		E32	DN50 (2") PN160
		E33	DN50 (2") PN250
		E34	DN50 (2") PN400

SELECTING THE RIGHT PILOTING OPTION

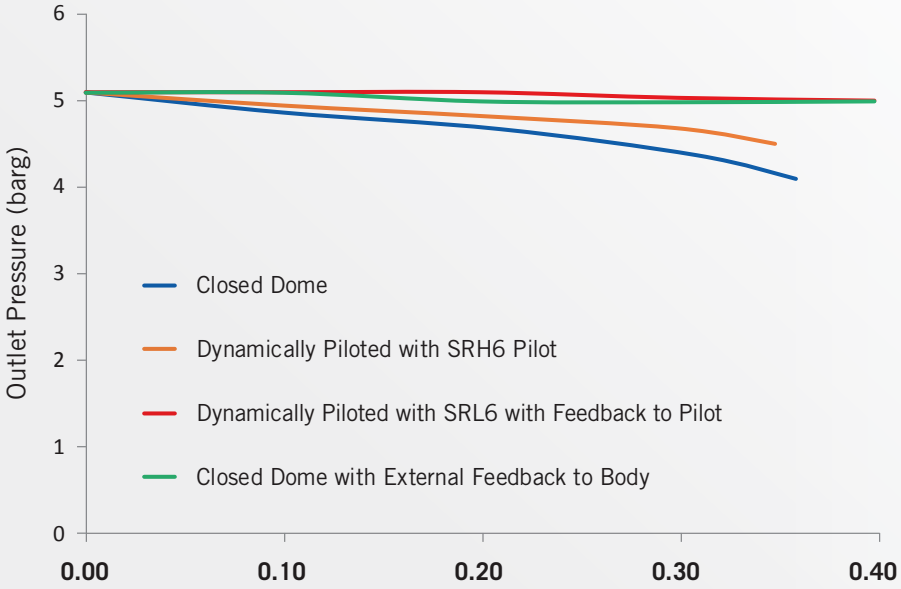
The configuration selected has an impact on the function and performance of the filter regulator assembly.

A **Closed Dome** (loaded with a needle valve block) will provide reliable pressure control.

Piloting with the SRH6 Pilot Regulator will reduce droop whilst improving delivery pressure stability and ease of pressure adjustment.

Piloting with the SRL15 Pilot Regulator (20 barg max) will improve accuracy of pressure setting and control. Note: Only the SRL15 High Accuracy Regulator offers external feedback to the pilot.

Connecting **External Sensing** will almost eliminate droop providing a dead stable delivery pressure to the application. Note: Closed Dome and SRH6 Pilot Regulator options can only feedback to the Main Regulator. Feedback is recommended up to outlet pressures of 20 barg.



Closed Dome

> Dome loaded via needle valves connected to the inlet supply
> Used where high pressure control accuracy over flow range is not required
> Without external feedback, this option displays the largest droop, per the graph
> If external feedback is connected, the droop will connect to a flat line, per the graph

Dynamically Piloted

> Pilot Regulator loads dome under constant flow for improved accuracy and ease of pressure adjustment
> Pressure setting not influenced by changes in ambient temperature

Dynamically Piloted with the SRH6 with feedback to main regulator

> Pilot Regulator loads dome under constant flow for improved accuracy and ease of pressure adjustment
> Feedback from outlet reduces droop to almost zero, per the graph curves for Closed Dome and SRL15 Pilots

Dynamically Piloted with external feedback to the SRL15 Pilot Regulator

> High Accuracy Pilot Regulator provides excellent control pressure accuracy
> Feedback from outlet reduces droop to almost zero

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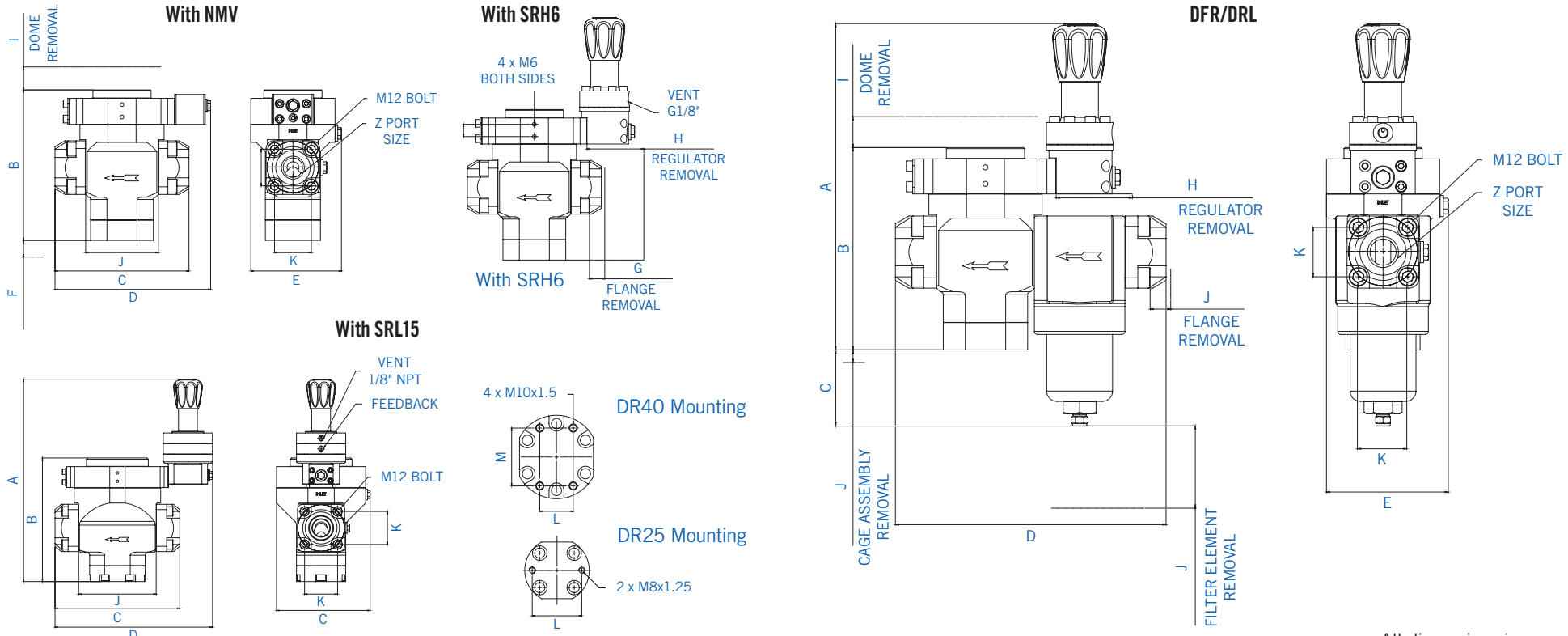
INSTALLATION DIMENSIONS - THREADED CONNECTIONS



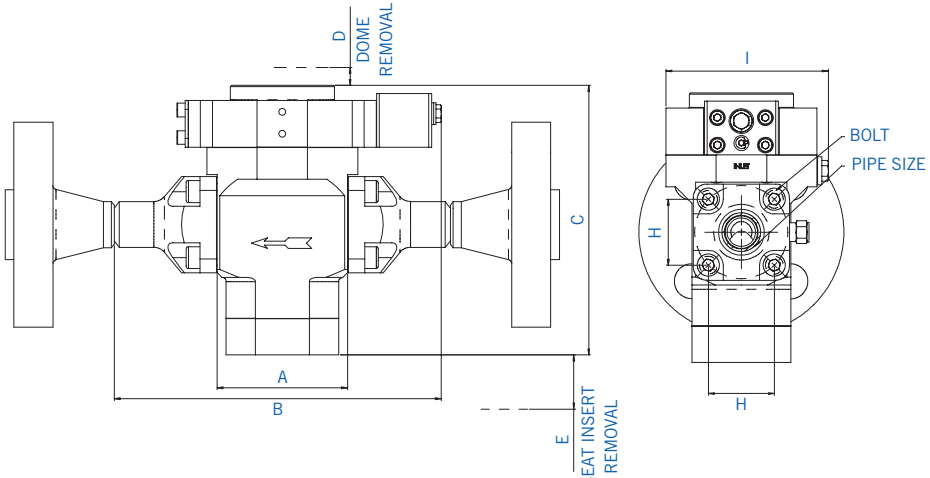
All dimensions in mm

Series DR25/40	Dimensions													Z - Port Size		Weight
	A	B	C	D	E	F	G	H	I	J	K	L	M	Inlet	Outlet	kg
DRH/DRL25 With NVM	-	197	175	199	118	70	70	50	30	95	48	63	-	G 1"	G 1"	12
DRH/DRL40 With NVM	-	236	238	259	178	90	70	50	40	148	63	43	74	G 1 - 1/2"	G 1 - 1/2"	29
DRH/DRL25 With SRH6	317	197	175	218	118	70	70	50	30	95	48	63	-	G 1"	G 1"	14
DRH/DRL40 With SRH6	351	236	238	278	178	90	70	50	40	148	63	43	74	G 1 - 1/2"	G 1 - 1/2"	31
DRH/DRL40 With SRH15	386	236	238	300	178	70	70	50	40	148	63	43	74	G 1 - 1/2"	G 1 - 1/2"	33

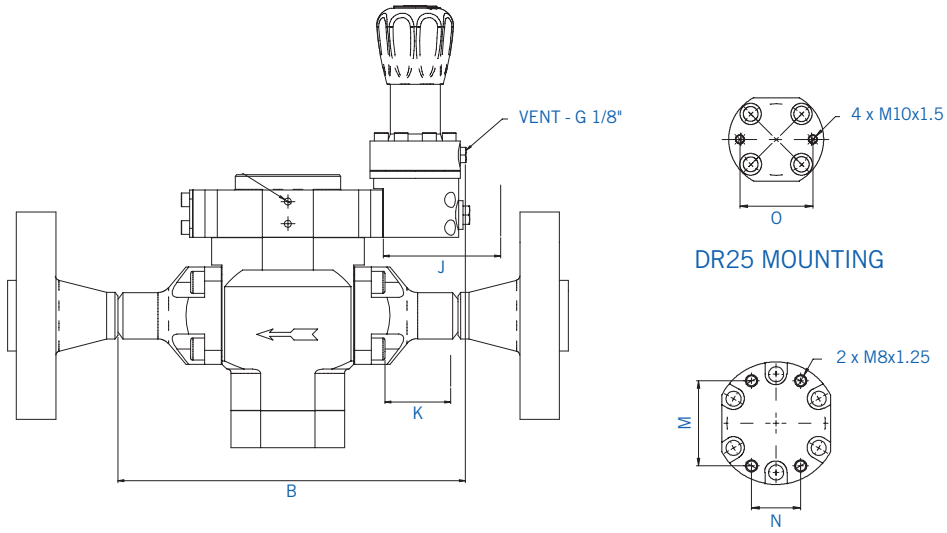
Series DFR25/40	Dimensions											Z - Port Size		Weight
	A	B	C	D	E	F	G	H	I	J	K	Inlet	Outlet	kg
DFRH/DFRL25 With SHR6	317	197	74	263	118	70	70	50	30	100	48	G 1"	G 1"	21
DFRH/DFRL40 With SHR6	351	236	170	278	178	90	70	50	40	190	48	G 1 - 1/2"	G 1 - 1/2"	49
DFRH/DFRL40 With SHR15	386	236	170	300	178	90	70	50	40	190	48	G 1 - 1/2"	G 1 - 1/2"	51

INSTALLATION DIMENSIONS - FLANGED CONNECTIONS

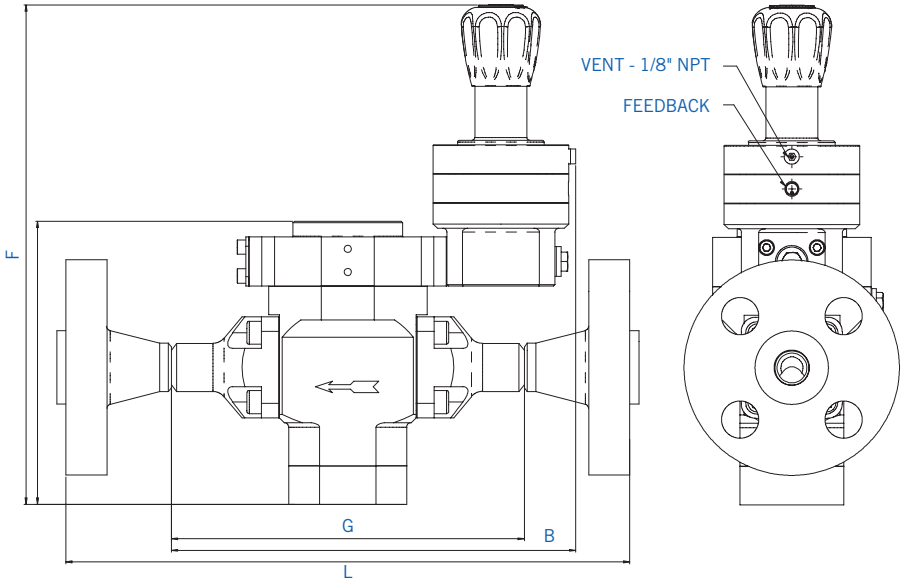
With NVM



With SRH6



With SRL15



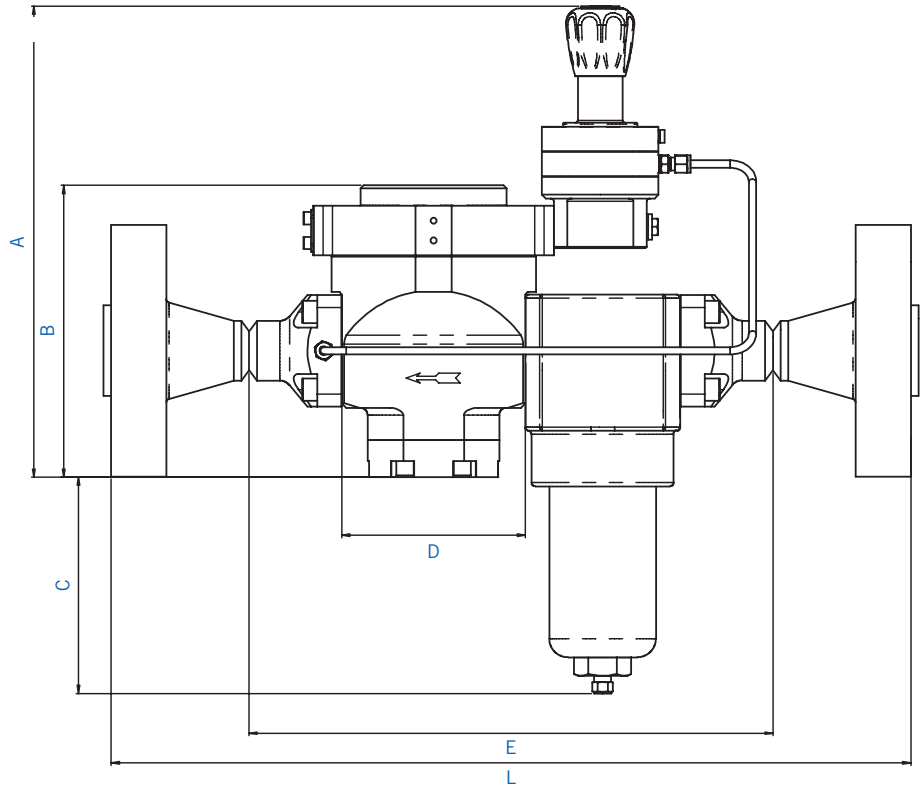
All dimensions in mm

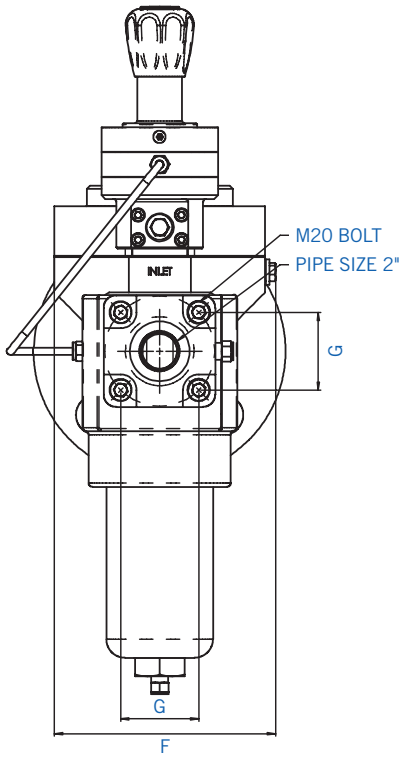
Series DFR25/40	Dimensions														Z - Port Size		Weight
	A	B	C	D	E	F	G	H	I	J	K	M	N	O	Inlet	Outlet	kg
DRH/DRL 25 With NVM	95	238	197	30	70	-	245	48	118	50	55	-	-	63	G1"	G1"	21
DRH/DRL 40 With NVM	148	293	236	40	90	-	298	63	178	50	85	74	43	-	G1-1/2"	G1-1/2"	54
DRH/DRL 25 With SRH6	95	251	197	30	70	317	245	48	118	50	55	-	-	63	G1"	G1"	23
DRH/DRL 40 With SRH6	148	306	236	40	90	351	298	63	178	50	85	74	43	-	G1-1/2"	G1-1/2"	56
DRH/DRL40 With SHR15	148	336	236	40	90	386	298	63	118	50	85	74	43	-	G1-1/2"	G1-1/2"	59

Note: Dimension 'L' will vary according to the thickness of the flange.

INSTALLATION DIMENSIONS - FLANGED CONNECTIONS

DFR With External Feedback





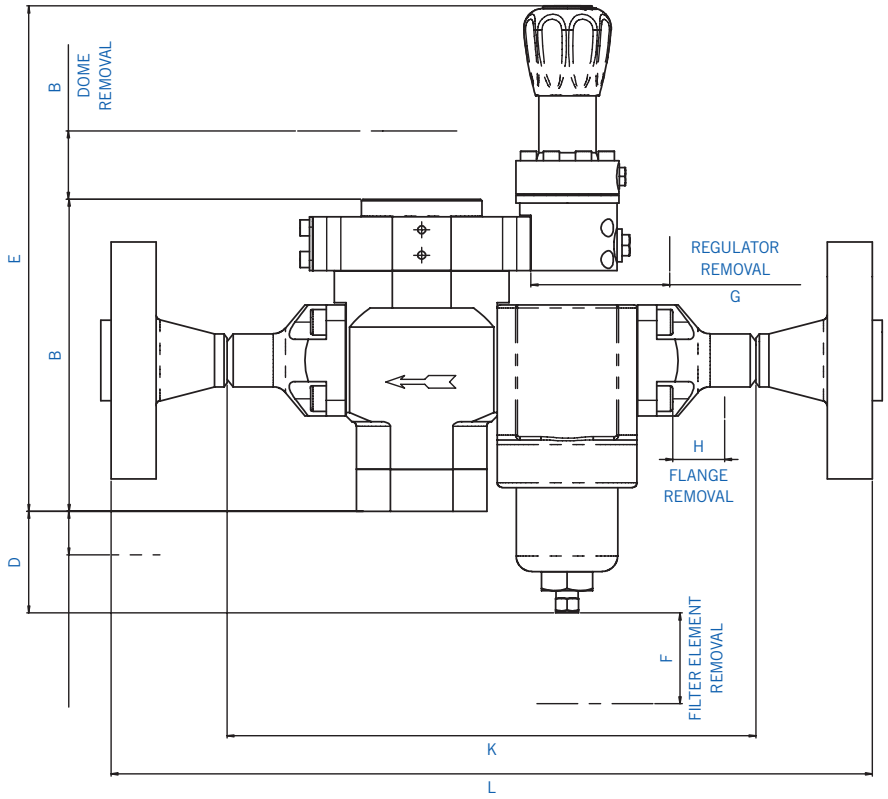
All dimensions in mm

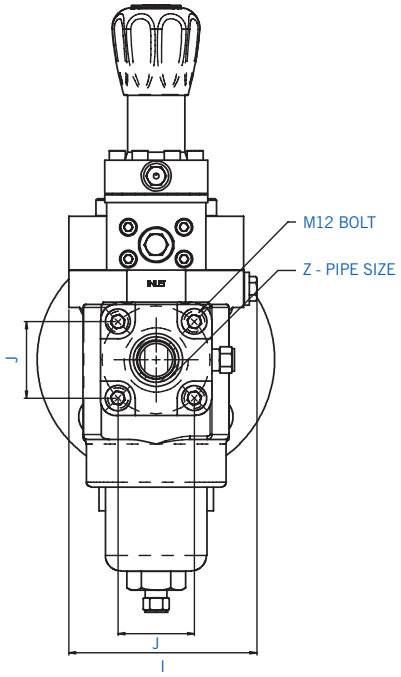
Series DFR25/40	Dimensions							Z - Port Size		Weight
	A	B	C	D	E	F	G	Inlet	Outlet	kg
DFRH/DFRL 25 With SRL15	347	197	74	95	333	118	48	G1"	G1"	35
DFRH/DFRL 40 With SRL15	386	236	170	148	423	178	63	G1-1/2"	G1-1/2"	76

Note: Dimension 'L' will vary according to the thickness of the flange.

INSTALLATION DIMENSIONS - FLANGED CONNECTIONS

DFR Without External Feedback





All dimensions in mm

Series DFR25/40	Dimensions											Z - Port Size		Weight
	A	B	C	D	E	F	G	H	I	J	K	Inlet	Outlet	kg
DFRH/DFRL 25 With SRH6	30	197	70	74	317	100	50	55	118	48	333	G1"	G1"	28
DFRH/DFRL 40 With SRH6	40	236	90	170	351	190	50	85	178	63	423	G1-1/2"	G1-1/2"	72
DFRH/DFRL 40 With SRL15	40	236	90	170	351	190	50	85	178	63	423	G1-1/2"	G1-1/2"	76

Note: Dimension 'L' will vary according to the thickness of the flange.

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