Pietro Fiorentini

Dival 500

Medium - Low Pressure Gas Regulator

TECHNICAL BROCHURE

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Who we are

We are a global organization that specializes in designing and manufacturing technologically advanced solutions for natural gas treatment, transmission and distribution systems.

We are the ideal partner for operators in the Oil & Gas sector, with a business solutions that span the whole natural gas chain.

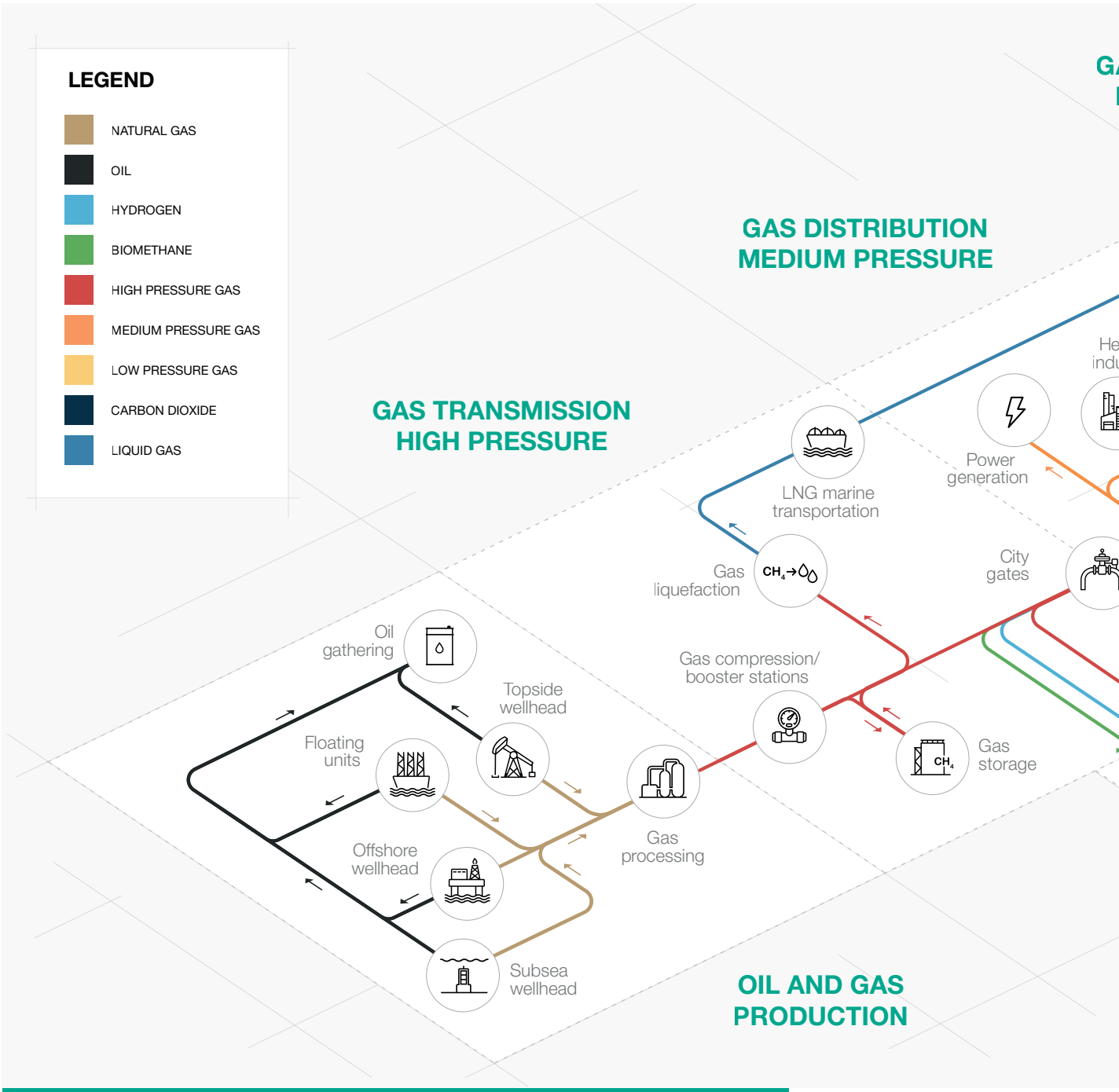
We are constantly evolving to meet our customers' highest expectations in terms of quality and reliability.

Our aim is to be a step ahead of the competition, with customized technologies and an after-sale service program undertaken with the highest level of professionalism.

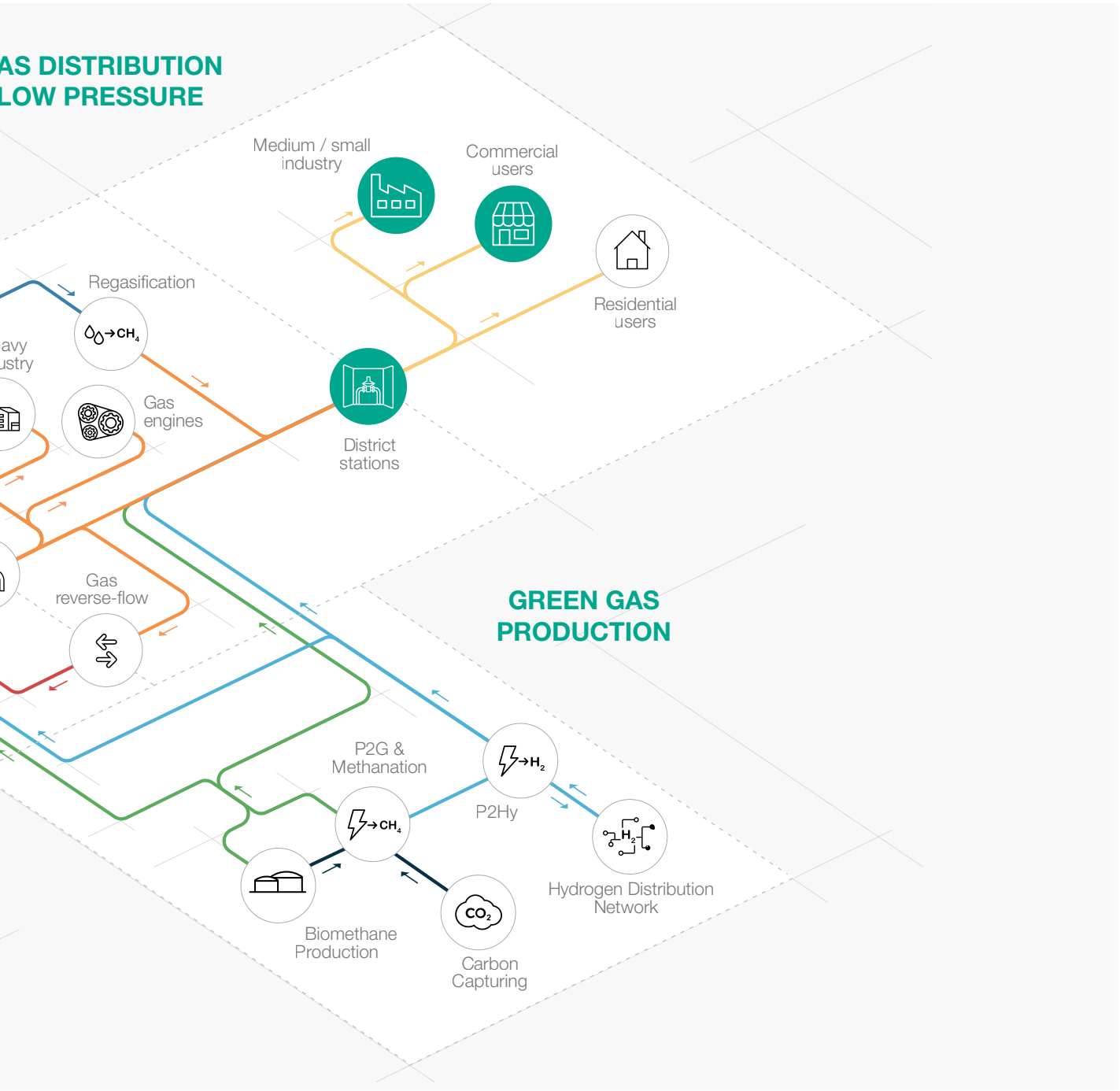
Pietro Fiorentini advantages

- Localized technical support
- Experience since 1940
- Operating in over 100 countries

Area of Application



Green icon indicates the application where this product is suitable for


AS DISTRIBUTION
LOW PRESSURE
Medium / small industry
Commercial users
Residential users
Regasification
Gas engines
District stations
Gas reverse-flow
GREEN GAS PRODUCTION
P2G & Methanation
P2Hy
Hydrogen Distribution Network
Biomethane Production
Carbon Capturing

Introduction

The **Dival 500** by Pietro Fiorentini is a **lever-operated** gas pressure regulator controlled by a diaphragm and contrasting regulated spring action.

Mainly used for medium and low pressure natural gas distribution networks, as well as commercial and industrial applications.

It should to be used with previously filtered non-corrosive gases.

According to the European Standard EN 334, it is classified as **Fail Open**.

The Dival 500 is **Hydrogen Ready** for NG-H2 blending.

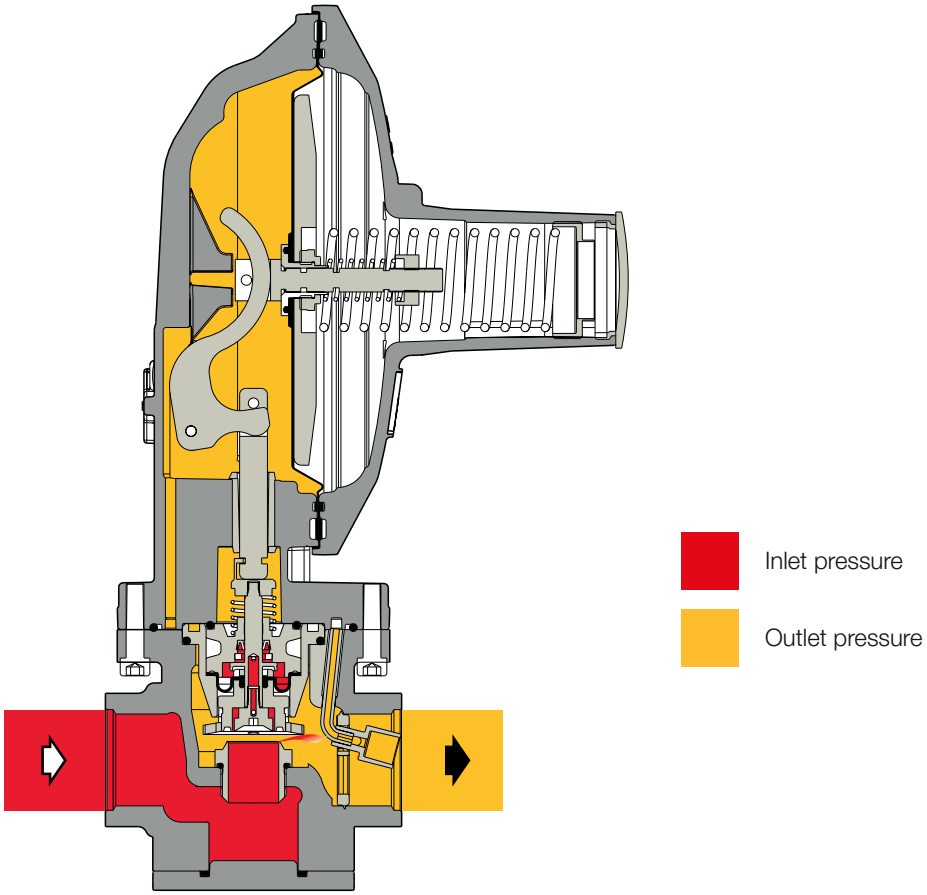


Figure 1 Dival 500

Features and Calibration ranges

The **Dival 500** is a **lever-operated** device for medium and low pressure with a unique **dynamic balancing system** which ensures an **outstanding turndown ratio** combined with an extremely **accurate outlet pressure control.**

A balanced pressure regulator it is a pressure regulator where delivery pressure accuracy is not affected by the fluctuation of the inlet pressure and flow during its operation. Therefore, a balanced pressure regulator can have a single orifice for all pressure and flow operating conditions.

This regulator is suitable for use with previously filtered, non-corrosive gases and distribution networks as well as high load industrial applications.

It is a **truly top entry design** which allows an **easy maintenance** of parts directly in the field **without removing the body from the pipework.**

Set point adjustement of the regulator is operated via a spring located in the top chamber.

The modular design of the Dival 500 pressure regulators allows to install built-in slam shut valve LA.

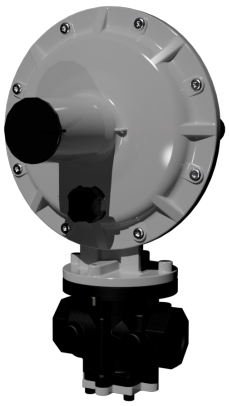


Figure 2 Dival 500

Figure 3 Dival 500 with LA

Dival 500 competitive advantages

- Balanced type
- Operates with low differential pressure
- High accuracy
- Fail Open plug and seat regulator
- Token IRV
- Internal sensing line
- Top Entry
- Easy maintenance
- Built-in accessories
- Biomethane compatible and 20% Hydrogen blending compatible. Higher blending available on request

Features

Features	Values
Design pressure* (PS[1] / DP[2])	up to 1 MPa for BP, up to 2 MPa for MP and TR up to 145 psig for BP, up to 290 psig for MP and TR
Ambient temperature* (TS[1])	from -20 °C to +60 °C from -4 °F to +140 °F
Inlet gas temperature*	from -20 °C to +60 °C from -4 °F to +140 °F
Inlet pressure (MAOP / p_{umax}[1])	• from (Pd + 0.01) MPa to 1 MPa from BP from (Pd + 0.01) MPa to 2 MPa for MP and TR • from (Pd + 1.45) psig to 145 psig from BP from (Pd + 1.45) psig to 290 psig for MP and TR
Range of downstream pressure (Wd[1])	• from 1.3 to 10 kPa for BP, from 10 to 30 kPa for MP, from 30 to 250 kPa for TR • from 5.22"w.c. to 1.45 psig for BP, from 1.45 to 4.35 psig for MP, from 4.35 to 36.26 psig for TR
Available accessories	LA slam shut, relief valve, monitor version
Minimum operating differential pressure (Δp_{min}[1])	10 kPa | 1.45 psig
Accuracy class (AC[1])	up to 10
Lock-up pressure class (SG[1])	up to 20 (depending on version and set point)
Nominal size (DN[1,2])	DN 1"x1"; DN 1"x1-1/2"
Connections	Threaded Rp EN 10226-1, NPT ASME B1.20.1

([1]) according to EN334 standard
([2]) according to ISO 23555-1 standard
(*) NOTE: Different functional features and/or extended temperature ranges may be available on request. Stated inlet gas temperature range is the maximum for which the equipment's full performance, including accuracy is guaranteed. Product may have a different pressure or temperature ranges according to the version and/or installed accessories.

Table 1 Features

Materials and Approvals

Part	Material
Body	Cast iron GS 400–18 UNI EN 1083 Aluminum EN AC 43300 UNI EN 1706
Cover	Aluminum
Seat	Brass
Diaphragm	Fabric finish rubber
O-ring	Nitrile rubber
NOTE: The materials indicated above refer to the standard models. Different materials can be provided according to specific needs.	

Table 2 Materials

Construction Standards and Approvals

The **Dival 500** regulator is designed according to the European standard EN 334.
The regulator reacts in opening (Fail Open) according to EN 334.

The product is certified according to European Directive 2014/68/EU (PED).
Leakage class: bubble tight, better than class VIII according to ANSI/FCI 70-3.

EN 334

PED-CE

Maximum allowable operating pressure

Design pressure (p_s according to EN334)				
Version	Body		Slam shut	
	MPa	psig	MPa	psig
Cast Iron Body 1"x1" and 1" x 1-1/2"	2.00	290	2.00	290
Aluminum Body 1"x1" and 1" x 1-1/2"	2.00	290	2.00	290

Table 3 Design pressure of body and slam shut

Design pressure (p_s according to EN334)						
Parts	Control head					
	BP		MP		TR	
	MPa	psig	MPa	psig	MPa	psig
Cover	2.00	290	2.00	290	2.00	290
Diaphragm	0.03	4.35	0.06	8.70	0.50	72.52
Max Diaphragm Δp	0.02	2.90	0.03	4.35	0.33	47.86

Table 4 Design pressure of control heads

MAOP Maximum Allowable Operating Pressure (p_{umax} according to EN334)							
Version		Control head					
		BP		MP		TR	
		MPa	psig	MPa	psig	MPa	psig
WITH / WITHOUT CE MARKING	All version (all body materials)	1.00	145	2.00	290	2.00	290
	All version (all body materials) + SSV	1.00	145	2.00	290	2.00	290

Table 5 MAOP Maximum Allowable Operating Pressure with/without CE marking

Springs ranges and control heads

Control heads pressure ranges				
	Control head BP	Control head MP	Control head TR	Spring Table web link
Model				
Dival 500	1.3 ÷ 10 kPa 5.2”w.c. ÷ 1.45 psig	10 ÷ 30 kPa 1.45 ÷ 4.35 psig	30 ÷ 250 kPa 4.35 ÷ 36.26 psig	TT 00280

Table 6 Control heads calibration range

General link to the calibration tables: **PRESS HERE** or use the QR code:

DIVAL 500 BP						
Spring part number	Spring color	d	Lo	De	Spring range ("w.c.)	
					Min.	Max.
US64470137RO	Red	1.8	115	34	5.2	6.8
US64470068GI	Yellow	2	110	34	6.8	10.0
US64470139NE	Black	2.2	115	34	10.0	13.7
US64470140MA	Brown	2.7	106	34	13.7	25.7
US64470071GR	Grey	2.8	115	34	25.7	40.2
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 7 TT 00280 - DIVAL 500 BP setting springs

DIVAL 500 MP						
Spring part number	Spring color	d	Lo	De	Spring range (psig)	
					Min.	Max.
US64470141VE	Green	3.2	120	34	1.4	2.4
US64470329AZ	Light blue	3.8	111	34	2.4	4.3
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 8 TT 00280 - DIVAL 500 MP setting springs

DIVAL 500 TR						
Spring part number	Spring color	d	Lo	De	Spring range (psig)	
					Min.	Max.
US64470143BI	White	4.5	97	34	4.3	5.8
US64470143BI	White	4.5	97	34	5.8	8.7
US64470144VI	Purple	5	100	34	8.7	14.5
US64470145AR	Orange	5.5	100	34	14.5	17.4
US64470145AR	Orange	5.5	100	34	17.4	26.1
US64470151BL	Blue	6.5	100	34.5	26.1	36.2
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 9 TT 00280 - DIVAL 500 TR setting springs

Recommended installations

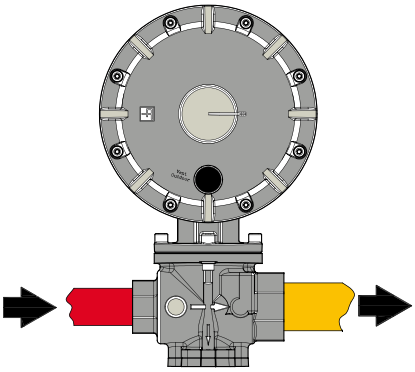


Figure 4 Dival 500 basic position

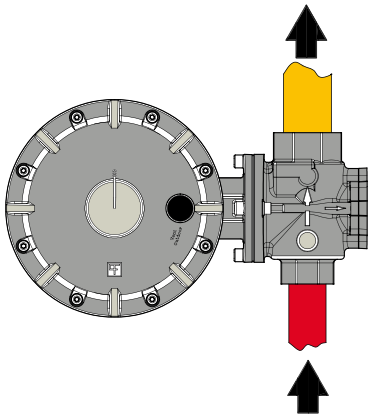


Figure 5 Dival 500 vertical installation 1

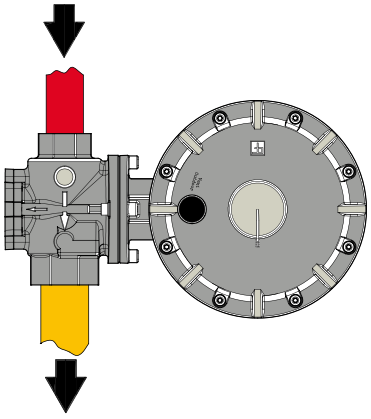


Figure 6 Dival 500 vertical installation 2

Accessories

For the pressure regulators:

- Slam shut valve
- Relief valve

Monitor configuration

The in-line monitor is generally installed upstream of the active regulator. Although the function of the monitor regulator is different, the two regulators are virtually identical from the point of view of their mechanical components. The only difference is that monitor is set at a higher pressure than active regulator. The Cg coefficients of the worker regulator with an in-line monitor is the same, but during worker regulator sizing it shall be considered the differential pressure drop generated by the fully open in-line monitor. As a practice, to incorporate this effect a Cg reduction of 20% of the worker regulator can be applied.

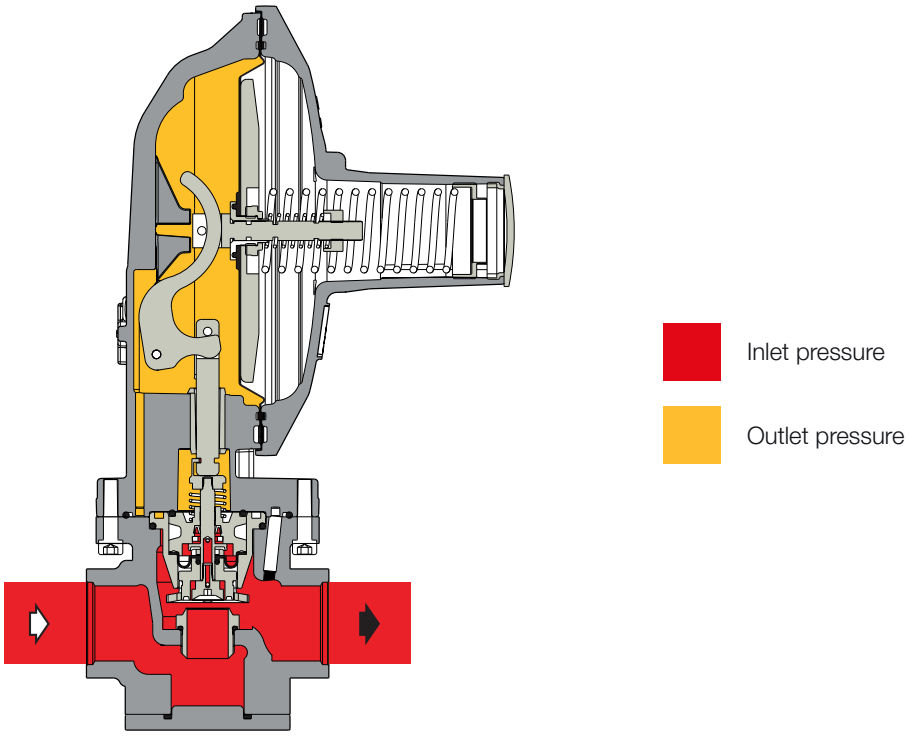


Figure 7 Dival 500 in-line monitor

Relief valve

The Dival 500 series can be equipped with an incorporated internal relief valve (IRV) that discharges a limited amount of gas into the atmosphere when the regulator outlet pressure exceeds the set value. The typical triggering events are:

- Thermal expansion of the downstream gas at zero flow condition (during lock-up).
- Pressure peaks caused by sudden closing of downstream appliances or in the event of small downstream buffer volume.

When the outlet pressure returns below the set value, the relief valve closes again.

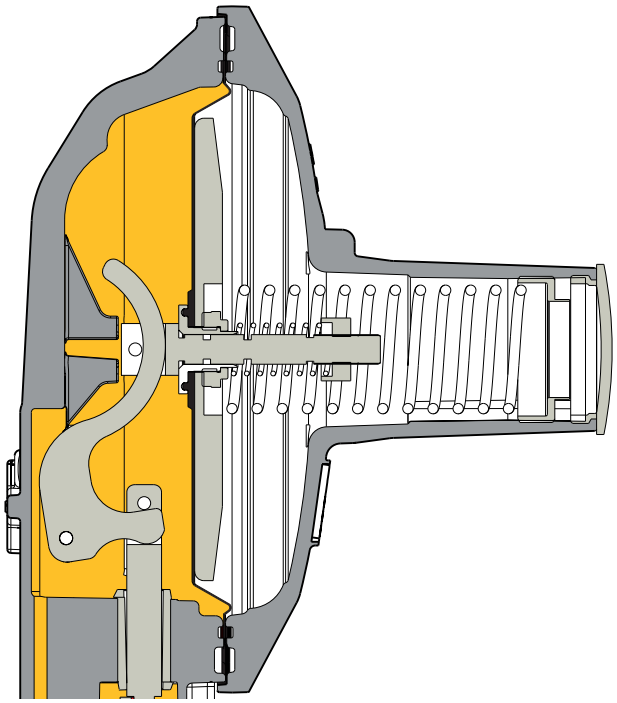


Figure 8 Dival 500 relief valve

Slam Shut LA

The Dival 500 pressure regulator offers the possibility of installing an **incorporated LA slam shut valve**, depending on the regulator size, and this can be done either during the manufacturing process or be retrofited in the field.

LA is available for all sizes.

Retrofitting the LA can be done without modifying the pressure regulator assembly. With the built-in slam shut, the Cg valve coefficients is 5% lower than the corresponding version without.

The main characteristics of this device are:

- OPSO — Overpressure Shut-Off
- UPSO — Underpressure Shut-Off
- Internal by-pass
- Push button for tripping test (optional)
- Compact dimensions
- Easy maintenance
- Remote tripping option
- Limit switch option

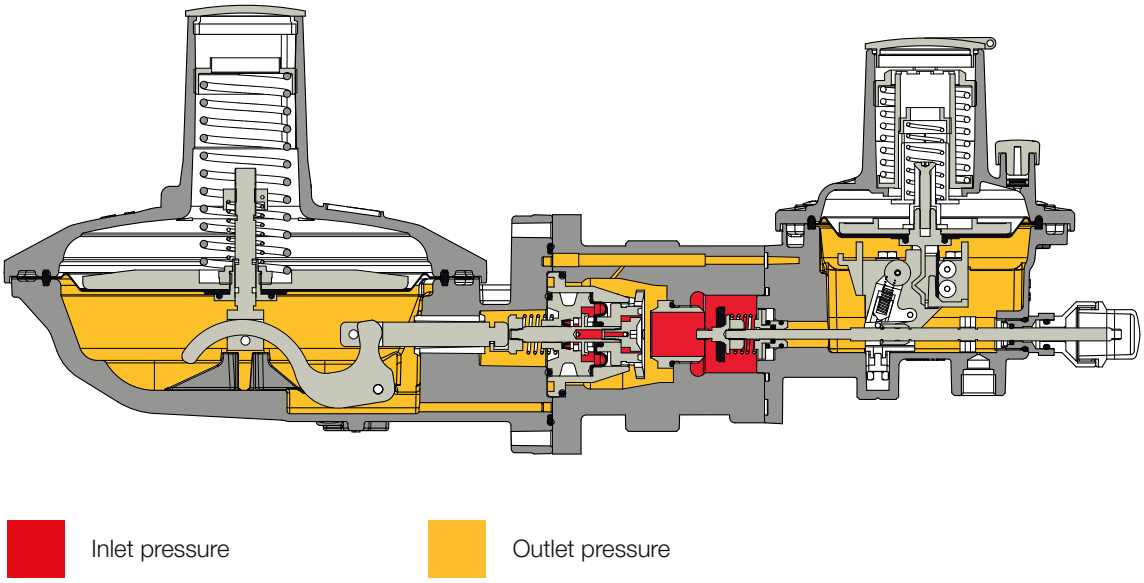


Figure 9 Dival 500 with LA

Pressure switch types and ranges					
SSV model	**Type**	**Operation**	**Range Wh**		**Spring Table web link**
			kPa	**psig**	
LA	BP	OPSO	3 - 18	0.43 - 2.61	TT 00214
		UPSO	0.6 - 6	0.087 - 0.87	
LA	MP	OPSO	14 - 45	2.03 - 6.52	TT 00214
		UPSO	1 - 24	0.14 - 3.48	
LA	TR	OPSO	25 - 550	3.62 - 79.77	TT 00214
		UPSO	10 - 350	1.45 - 50.76	

Table 10 Settings table

Shut-off device model LA performance	
Worker set point	**Minimum suggested set-point**
1.7 kPa 7”w.c.	3.7 kPa 15”w.c.
13.7 kPa 2 psig	20.6 kPa 3 psig
34.4 kPa 5 psig	48.2 kPa 7 psig
68.9 kPa 10 psig	89.6 kPa 13 psig
Please see PF monitor and accesory setting sheet for precise settings.	

Table 11 Recommended slam shut settings

LA/BP "OPSO"						
Spring part number	Spring color	d	Lo	De	Spring range ("w.c.)	
					Min.	Max.
US64470112RO	Red	2.2	44	34	11.9	19.9
US64470115GR	Grey	2.8	42	34	19.9	72.3
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 12 TT 002014 - LA/BP "OPSO" setting springs

LA/BP "UPSO"						
Spring part number	Spring color	d	Lo	De	Spring range ("w.c.)	
					Min.	Max.
US64470024BI	White	1.3	45	15	2.2	24.1
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 13 TT 002014 - LA/BP "UPSO" setting springs

LA/MP "OPSO"						
Spring part number	Spring color	d	Lo	De	Spring range (psig)	
					Min.	Max.
US64470115GR	Grey	2.8	42	34	2.0	2.6
US64470116GI	Yellow	3.2	40	34	2.6	4.0
US64470051BI	White	3.2	50	34	4.0	6.5
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 14 TT 002014 - LA/MP "OPSO" setting springs

LA/MP "UPSO"						
Spring part number	Spring color	d	Lo	De	Spring range ("w.c.)	
					Min.	Max.
US64470024BI	White	1.3	45	15	3.9	24.0
US64470038GI	Yellow	2	40	15	24.0	96.4
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 15 TT 002014 - LA/MP "UPSO" setting springs

LA/TR “OPSO”						
Spring part number	Spring color	d	Lo	De	Spring range (psig)	
					Min.	Max.
US64470116GI	Yellow	3.2	40	34	3.6	7.9
US64470051BI	White	3.2	50	34	7.9	12.3
US64470057BL	Blue	3.5	50	34	12.3	20.3
US64470058AR	Orange	4	50	34	20.3	36.2
US64470059AZ	Light blue	4.5	50	34	36.2	58.0
US64470060NE	Black	5	48	34	58.0	79.7
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 16 TT 002014 - LA/TR “OPSO” setting springs

LA/TR “UPSO”						
Spring part number	Spring color	d	Lo	De	Spring range (psig)	
					Min.	Max.
US64470038GI	Yellow	2	40	15	1.4	7.2
US64470045MA	Brown	2.4	41	15.3	7.2	14.5
US64470046BL	Blue	3	40	15	14.5	29.0
US64470149NE	Black	3.2	43	15	29.0	50.7
d = Wire Diameter (mm) **Lo** = Spring Length (mm) **De** = External Diameter (mm)						

Table 17 TT 002014 - LA/TR “UPSO”

General link to the calibration tables: **PRESS HERE** or use the QR code:

Weights and Dimensions

Dival 500

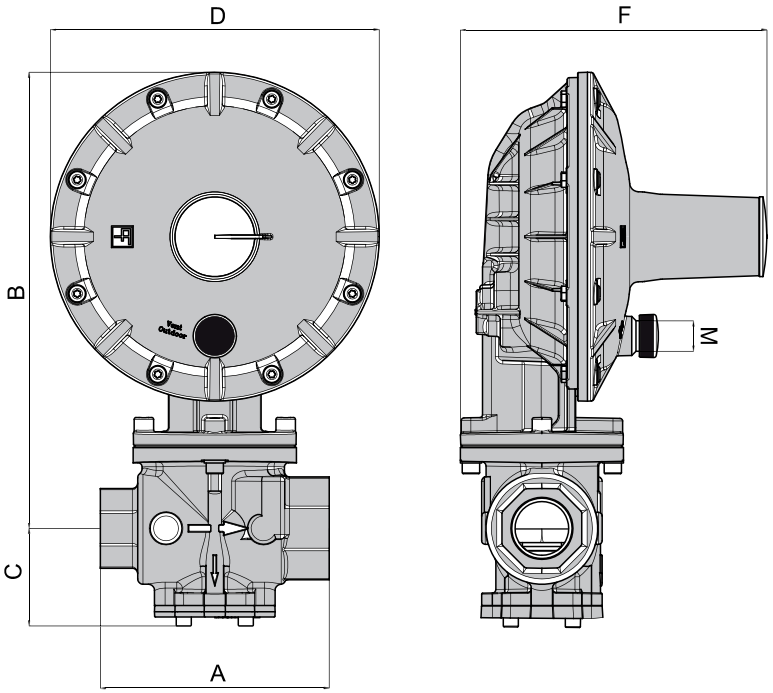


Figure 10 Dival 500 dimensions

Weights and Dimensions (for other connections please contact your closest Pietro Fiorentini representative)				
Size (DN) - [mm] **Size (DN)** - inches	**25** **1" x 1"**		**40** **1" x 1-1/2"**	
	[mm]	inches	[mm]	inches
A	100	3.9"	129	5.1"
B	255	10.0"	257	10.1"
C	44	1.7"	55	2.2"
D	185.5	7.3"	185.5	7.3"
F	173	6.8"	173	6.8"
DNE	1" ISO 7/1		1" ISO 7/1	
DNU	1" ISO 7/1		1-1/2" ISO 7/1	
Tubing Connections	Øe 10 x Øi 8 (on request imperial sizing)			
Weight	Kg	lbs	Kg	lbs
	3.6	7.9	3.8	8.4

Table 18 Weights and dimensions

Dival 500 + LA

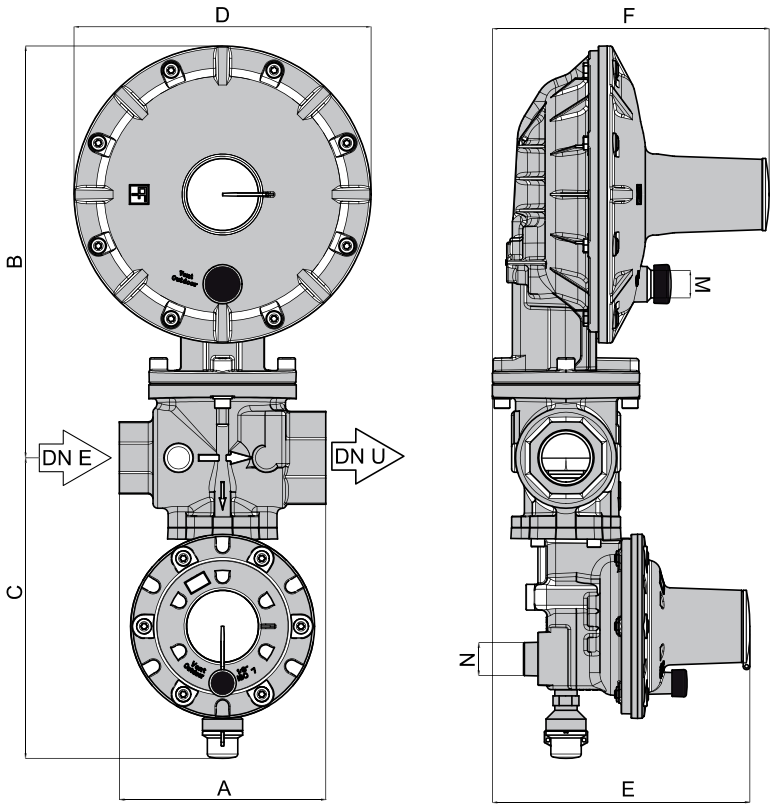


Figure 11 Dival 500 + LA dimensions

Weights and Dimensions (for other connections please contact your closest Pietro Fiorentini representative)				
Size (DN) - [mm] **Size (DN)** - inches	**25** **1" x 1"**		**40** **1" x 1-1/2"**	
	[mm]	inches	[mm]	inches
A	100	3.9"	129	5.1"
B	255	10.0"	257	10.1"
C	182	7.2"	182	7.2"
D	185.5	7.3"	185.5	7.3"
E	161	6.3"	161	6.3"
F	173	6.8"	173	6.8"
G	1/4"		1/4"	
H	1/4"		1/4"	
DNE	1" ISO 7/1		1" ISO 7/1	
DNU	1" ISO 7/1		1-1/2" ISO 7/1	
Tubing Connections	Øe 10 x Øi 8 (on request imperial sizing)			
Weight	Kg	lbs	Kg	lbs
	4.2	9.3	4.4	9.7

Table 19 Weights and dimensions

Sizing and Cg

In general, the choice of a regulator is made based on the calculation of the flow rate determined by the use of formulae using the flow rate coefficients (Cg) and the form factor (K1) as indicated by the EN 334 standard. Sizing is available through the on-line Pietro Fiorentini sizing program.

Flow rate coefficient		
Nominal size	25	40
Inches	1”	1-1/2”
Cg	195	245
K1	97	96

REMARK: For safety relief valve sizing it is required to use the Cg values of this table regardless the accessories installed on the regulator. As per EN334 Cg value acceptance criteria these values may vary up to 10% which we recommend considering during the sizing process.

Table 20 Flow rate coefficient

For sizing **PRESS HERE** or use the QR code:

Note: In case you do not have the proper credentials to access, feel free to contact your closest Pietro Fiorentini representative.

In general the on-line sizing considers multiple variables as the regulator is installed in a system, enabling a better and multiperspective approach to the sizing.

For different gases, and for natural gas with a different relative density other than 0.61 (compared to air), the correction coefficients from the following formula shall be applied.

$$F_c = \sqrt{\frac{175.8}{S \times (273.16 + T)}}$$

S = relative density (refer to Table 21)
T = gas temperature (°C)

$$F_c = \sqrt{\frac{316.44}{S \times (459.67 + T)}}$$

S = relative density (refer to Table 21)
T = gas temperature (°F)

Correction Factor Fc		
Gas Type	**Relative Density S**	**Correction Factor Fc**
Air	1.00	0.78
Propane	1.53	0.63
Butane	2.00	0.55
Nitrogen	0.97	0.79
Oxygen	1.14	0.73
Carbon Dioxide	1.52	0.63
Note: the table shows the Fc correction factors valid for Gas, calculated at a temperature of 15°C and at the declared relative density.		

Table 21 Correction Factor Fc

Flow rate conversion
Stm^3/h x 0.94795 = Nm^3/h

Nm^3/h reference conditions:
T= 0 °C; P= 1 bar | T= 32 °F; P= 14.5 psig
Stm^3/h reference conditions:
T= 15 °C; P= 1 bar | T= 59 °F; P= 14.5 psig

Table 22 Flow rate conversion

CAUTION:

In order to get optimal performance, to avoid premature wear on the regulators components, and to limit noise emissions, it is recommended to check the gas speed and its compliance with local practice and regulations. The gas speed at the outlet flange of the regulator which may be calculated by the following formula:

$$V = 345.92 \times \frac{Q}{DN^2} \times \frac{1 - 0.002 \times Pd}{1 + Pd}$$

V = gas speed in m/s
Q = gas flow rate in Stm^3/h
DN = nominal size of regular in mm
Pd = outlet pressure in barg

$$V = 0.0498 \times \frac{Q}{DN^2} \times \frac{14.504 - 0.002 \times Pd}{14.504 + Pd}$$

V = gas speed in ft/s
Q = gas flow rate in Scfh
DN = nominal size of regular in inches
Pd = outlet pressure in psi

Flow capacity tables

Dival 500 BP - DN 1”

From 1.5 kPa [6”w.c.] to 7 kPa [28”w.c.]

Dival 500 BP - (accuracy 10% ; AC10 according to EN334)

Inlet pressure		Outlet pressure									
		1.5 kPa | 6” w.c.		1.7 kPa | 7” w.c.		2 kPa | 8” w.c.		3.5 kPa | 14” w.c.		7 kPa | 28” w.c.	
kPa	psig	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh
14	2	20	800	25	900	-	-	-	-	-	-
34	5	30	1100	35	1300	40	1500	60	2200	60	2200
103	15	50	1800	50	1800	55	2000	105	3800	120	4300
207	30	60	2200	60	2200	65	2300	120	4300	160	5700
414	60	60	2200	60	2200	60	2200	120	4300	175	6200
689	100	60	2200	60	2200	60	2200	120	4300	160	5700
862	125	60	2200	55	2000	60	2200	120	4300	160	5700

Cg = 195 K1= 97

Table 23 Dival 500 BP flow rate with outlet pressure from 1.5 kPa | 6”w.c. up to 7 kPa | 28”w.c.

Dival 500 BP - DN 1”x1-1/2”

Dival 500 BP - (accuracy 10% ; AC10 according to EN334)

Inlet pressure		Outlet pressure									
		1.5 kPa | 6” w.c.		1.7 kPa | 7” w.c.		2 kPa | 8” w.c.		3.5 kPa | 14” w.c.		7 kPa | 28” w.c.	
kPa	psig	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh
14	2	45	1600	50	1800	-	-	-	-	-	-
34	5	80	2900	85	3100	95	3400	95	3400	95	3400
103	15	190	6800	190	6800	195	6900	195	6900	195	6900
207	30	270	9600	280	9900	295	10500	320	11400	340	12100
414	60	155	5500	155	5500	160	5700	400	14200	400	14200
689	100	150	5300	150	5300	160	5700	400	14200	400	14200
862	125	150	5300	150	5300	160	5700	400	14200	400	14200

Cg = 245 K1= 96

Table 24 Dival 500 BP flow rate with outlet pressure from 1.5 kPa | 6”w.c. up to 7 kPa | 28”w.c.

Note: Recommended max flow rate are considering multiple factors such as: extend the regulator’s life, mitigate the erosion/vibrations for high velocity and to minimize the noise emission.
Remark: all capacity stated are considering a stand alone regulator. In case of incorporated accessories a reduction of flow shall be considered.

Dival 500 MP - DN 1”

From 10.3 kPa [1.5 psig] to 27.6 kPa [4 psig]

Dival 500 MP - (accuracy 10% ; AC10 according to EN334)											
Inlet pressure		**Outlet pressure**									
		10.3 kPa | 1.5 psig		13.8 kPa | 2 psig		17.2 kPa | 2.5 psig		20.7 kPa | 3 psig		27.6 kPa | 4 psig	
kPa	psig	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh
14	2	-	-	-	-	-	-	-	-	-	-
34	5	60	2200	60	2200	60	2200	-	-	-	-
103	15	110	3900	115	4100	120	4300	120	4300	130	4600
207	30	150	5300	175	6200	165	5900	170	6100	210	7500
414	60	200	7100	210	7500	205	7300	215	7600	275	9800
862	125	210	7500	220	7800	215	7600	225	8000	295	10500
1724	250	210	7500	220	7800	215	7600	225	8000	290	10300
Cg = 195 K1= 97											

Table 25 Dival 500 MP flow rate with outlet pressure from 10.3 kPa | 1.5 psig up to 27.6 kPa | 4 psig

Dival 500 MP - DN 1”x1-1/2”

Dival 500 MP - (accuracy 10% ; AC10 according to EN334)											
Inlet pressure		**Outlet pressure**									
		10.3 kPa | 1.5 psig		13.8 kPa | 2 psig		17.2 kPa | 2.5 psig		20.7 kPa | 3 psig		27.6 kPa | 4 psig	
kPa	psig	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh
14	2	-	-	-	-	-	-	-	-	-	-
34	5	90	3200	90	3200	75	2700	-	-	-	-
103	15	190	6800	190	6800	170	6100	165	5900	160	5700
207	30	310	11000	310	11000	290	10300	300	10600	300	10600
414	60	450	15900	450	15900	450	15900	450	15900	450	15900
862	125	450	15900	450	15900	450	15900	450	15900	450	15900
1724	250	445	15800	445	15800	445	15800	445	15800	445	15800
Cg = 245 K1= 96											

Table 26 Dival 500 MP flow rate with outlet pressure from 10.3 kPa | 1.5 psig up to 27.6 kPa | 4 psig

Note: Recommended max flow rate are considering multiple factors such as: extend the regulator’s life, mitigate the erosion/vibrations for high velocity and to minimize the noise emission.
Remark: all capacity stated are considering a stand alone regulator. In case of incorporated accessories a reduction of flow shall be considered.

Dival 500 TR - DN 1”

From 34.5 kPa [5 psig] to 241.3 kPa [35 psig]

Dival 500 TR - (accuracy 10% ; AC10 according to EN334)

Inlet pressure		Outlet pressure									
		34.5 kPa | 5 psig		68.9 kPa | 10 psig		103.4 kPa | 15 psig		137.9 kPa | 20 psig		241.3 kPa | 35 psig	
kPa	psig	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh
14	2	-	-	-	-	-	-	-	-	-	-
34	5	-	-	-	-	-	-	-	-	-	-
103	15	110	3900	100	3600	-	-	-	-	-	-
207	30	175	6200	190	6800	165	5900	155	5500	-	-
414	60	260	9200	325	11500	310	11000	310	11000	305	10800
862	125	320	11400	395	14000	400	14200	400	14200	400	14200
1724	250	320	11400	390	13800	395	14000	395	14000	395	14000

Cg = 195 K1= 97

Table 27 Dival 500 TR flow rate with outlet pressure from 34.5 kPa | 5 psig up to 241.3 kPa | 35 psig

Dival 500 TR - DN 1”x1-1/2”

Dival 500 TR - (accuracy 10% ; AC10 according to EN334)

Inlet pressure		Outlet pressure									
		34.5 kPa | 5 psig		68.9 kPa | 10 psig		103.4 kPa | 15 psig		137.9 kPa | 20 psig		241.3 kPa | 35 psig	
kPa	psig	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh	Stm³/h	Scfh
14	2	-	-	-	-	-	-	-	-	-	-
34	5	-	-	-	-	-	-	-	-	-	-
103	15	130	4600	120	4300	-	-	-	-	-	-
207	30	225	8000	235	8300	210	7500	220	7800	-	-
414	60	410	14500	420	14900	415	14700	435	15400	370	13100
862	125	475	16800	500	17700	500	17700	500	17700	500	17700
1724	250	475	16800	495	17500	495	17500	495	17500	495	17500

Cg = 245 K1= 96

Table 28 Dival 500 TR flow rate with outlet pressure from 34.5 kPa | 5 psig up to 241.3 kPa | 35 psig

Note: Recommended max flow rate are considering multiple factors such as: extend the regulator’s life, mitigate the erosion/vibrations for high velocity and to minimize the noise emission.
Remark: all capacity stated are considering a stand alone regulator. In case of incorporated accessories a reduction of flow shall be considered.

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