

HPRT SERIES

LPRT SERIES

CB SERIES

MBC SERIES

VGD SERIES

Pressure reduction and regulation units allow to bring gas pressure available in the line to values suited to the specific application. Gas trains include a series of safety and control devices for gas feeding to the burner.

They are constructed and supplied with two different selection options (separated or assembled units). The selection has to be made on the specific application (available pressure, installation chances,...).

This permits to reach the best flexiblty using pre-assembled units, which are also tested in the factory according with existing norms and designed for a easy installation.



HPRT	Pin = 0,5 ÷ 4 bar
LPRT	Pin <= 0,5 bar
CB	Pin <= 0,5 bar
MBC	Pin <= 0,5 bar (<= 0,36 threaded)
VGD	Pin <= 0,5 bar

Pressure Regulating-Reducing Units / Safety-Regulating Gas Trains / Safety-Regulating Proportional Gas Trains

HPRT - LPRT - CB - MBC - VGD SERIES

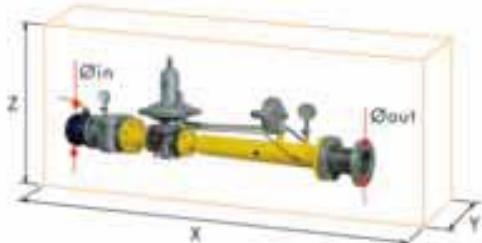
Overall dimensions (mm)

LOW PRESSURE REGULATING / REDUCING UNITS (LPRT series)



MODEL	X	Y	Z	Ø IN	Ø OUT
► LPRT 40	532	130	245	Rp 3/4	R 3/4
► LPRT 80	600	145	310	Rp 1	R 1
► LPRT 160	710	195	365	Rp 1 1/2	R 1 1/2
► LPRT 250	880	250	450	Rp 2	R 2
► LPRT 500	880	285	590	DN 65	DN 65
► LPRT 750	955	285	590	DN 80	DN 80
► LPRT 1000	1070	350	760	DN 100	DN 100
► LPRT 1500	1146	400	1000	DN 125	DN 125
► LPRT 2000	1275	480	1180	DN 150	DN 150

HIGH PRESSURE REGULATING / REDUCING UNITS (HPRT series)



MODEL	X	Y	Z	Ø IN	Ø OUT
► HPRT 80	1223	180	400	Rp 1 1/2	R 1 1/2
► HPRT 160	1275	180	410	Rp 1 1/2	R 2
► HPRT 250	1200	280	560	Rp 2	DN 65
► HPRT 500	1750	280	563	DN 65	DN 65
► HPRT 750	1890	280	563	DN 80	DN 80
► HPRT 1000	2070	380	725	DN 100	DN 100
► HPRT 1500	2120	500	810	DN 100	DN 100
► HPRT 2000	2150	500	810	DN 125	DN 125

SAFETY / REGULATING GAS TRAINS (CB series)

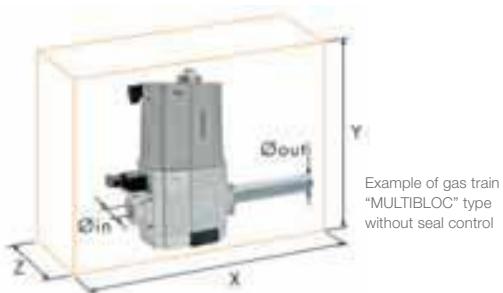


MODEL	X	Y	Z	Ø IN	Ø OUT
► CB 40/1	891	195	261	Rp 1 1/2	R 1 1/2
► CB 50/1	986	250	328	Rp 2	R 2
► CBF 65/1	874	285	356	DN 65	DN 65
► CBF 80/1	934	285	416	DN 80	DN 80
► CBF 100/1	1054	350	501	DN 100	DN 100
► CBF 125/1	1164	400	780	DN 125	DN 125
► CB 50/1 CT	986	250	328	Rp 2	R 2
► CBF 65/1 CT	874	285	356	DN 65	DN 65
► CBF 80/1 CT	934	285	416	DN 80	DN 80
► CBF 100/1 CT	1054	350	501	DN 100	DN 100
► CBF 125/1 CT	1164	400	780	DN 125	DN 125

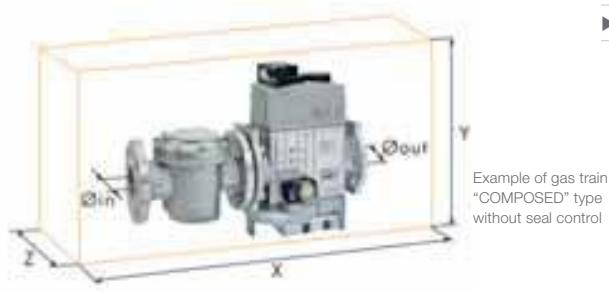
HPRT - LPRT - CB - MBC - VGD SERIES

Overall dimensions (mm)

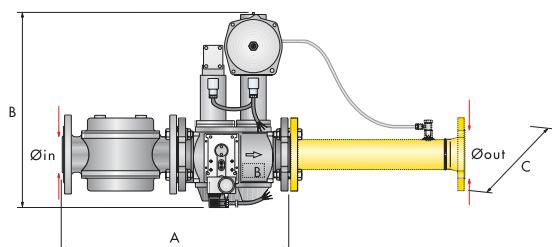
SAFETY / REGULATING GAS TRAINS (MBC series)



MODEL	X	Y	Z	Ø IN	Ø OUT
► MBC 1200 SE 50	573	425	161	2"	2"
► MBC 1900 SE 65	583	430	237	DN 65	DN 65
► MBC 3100 SE 80	633	500	240	DN 80	DN 80
► MBC 5000 SE 100	733	576	350	DN 100	DN 100
► MBC 1200 SE 50 CT	573	425	290	2"	2"
► MBC 1900 SE 65 CT	583	430	300	DN 65	DN 65
► MBC 3100 SE 80 CT	633	500	320	DN 80	DN 80
► MBC 5000 SE 100 CT	733	576	350	DN 100	DN 100



SAFETY / REGULATING PROPORTIONAL GAS TRAINS (VGD series)



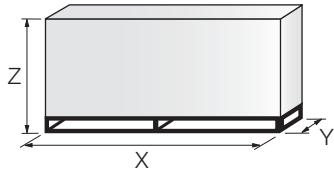
MODEL	A	B	C	Ø IN	Ø OUT
► VGD 50	615	245	495	2"	DN 80
► VGDF 65	600	245	520	DN 65	DN 80
► VGDF 80	625	245	545	DN 80	DN 80
► VGDF 100	755	245	575	DN 100	DN 80

Pressure Regulating-Reducing Units / Safety-Regulating Gas Trains / Safety-Regulating Proportional Gas Trains

HPRT - LPRT - CB - MBC - VGD SERIES

Overall dimensions (mm)

PACKAGING (HPRT - LPRT - CB - MBC - VGD series)

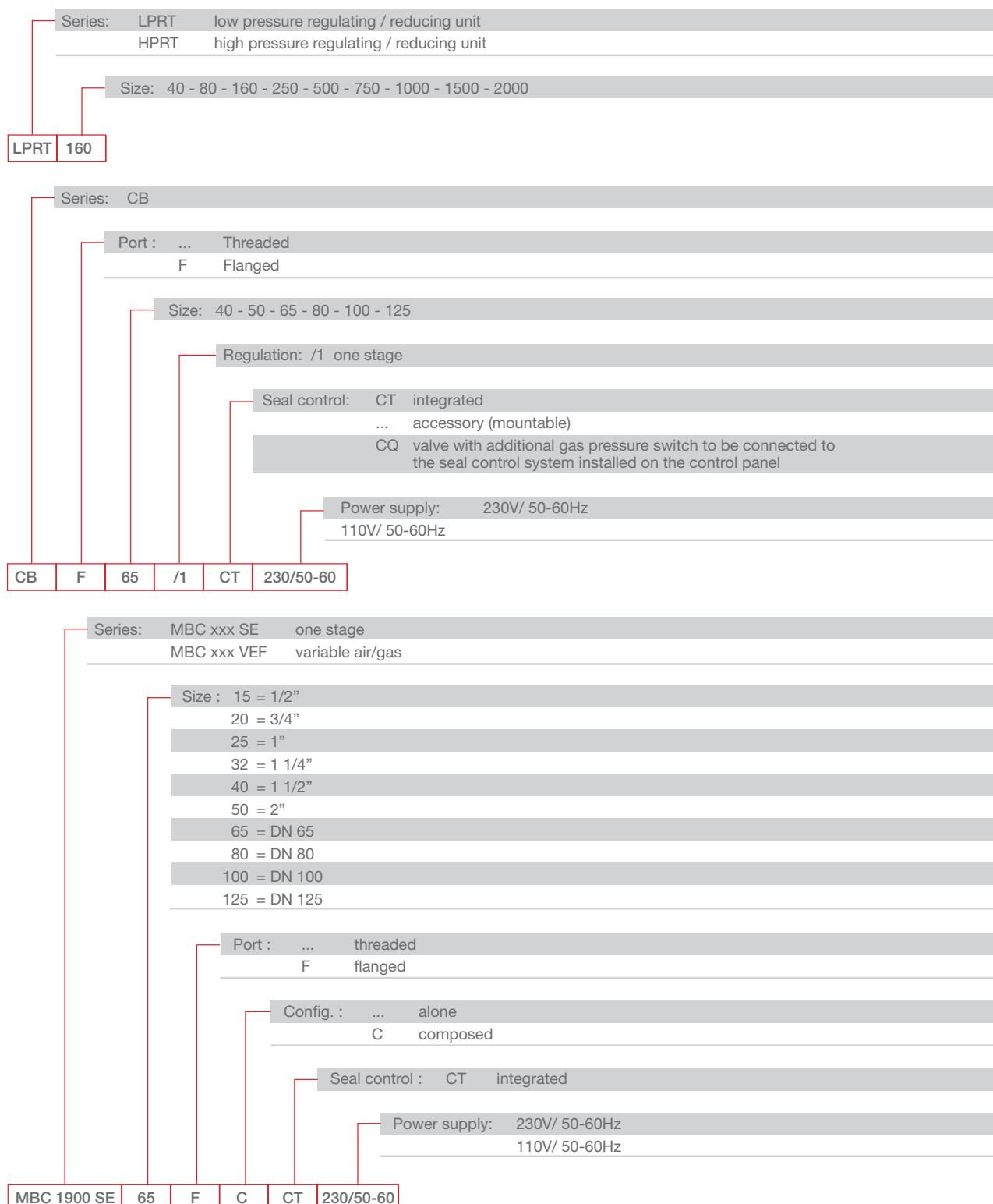


Model	X	Y	Z
► LPRT 40	532	245	292
► LPRT 80	310	290	397
► LPRT 160	350	307	449
► LPRT 250	400	333	554
► LPRT 500	532	150	292
► LPRT 750	535	165	292
► LPRT 1000	290	185	338
► LPRT 1500	310	200	397
► LPRT 2000	350	220	449
► HPRT 80	1230	460	560
► HPRT 160	1230	460	560
► HPRT 250	1230	460	560
► HPRT 500	1300	530	590
► HPRT 750	1300	530	590
► HPRT 1000	1300	530	590
► HPRT 1500	1390	710	795
► HPRT 2000	1390	710	795
► CB 40/1	1050	370	320
► CB 50/1	1050	370	320
► CBF 65/1	940	480	530
► CBF 80/1	1120	570	580
► CBF 100/1	1120	570	580
► CBF 125/1	1390	710	795
► CB 50/1 CT	1050	370	320
► CBF 65/1 CT	940	480	530
► CBF 80/1 CT	1120	570	580
► CBF 100/1 CT	1120	570	580
► CBF 125/1 CT	1390	710	795
► MBC 1200 SE 50	650	490	350
► MBC 1900 SE 65	690	410	490
► MBC 3100 SE 80	750	460	570
► MBC 5000 SE 100	850	510	660
► MBC 1200 SE 50 CT	650	490	350
► MBC 1900 SE 65 CT	690	410	490
► MBC 3100 SE 80 CT	750	460	570
► MBC 5000 SE 100 CT	850	510	660
► VGD 50	860	360	620
► VGDF 65	860	360	620
► VGDF 80	860	360	620
► VGDF 100	860	360	620

HPRT - LPRT - CB - MBC - VGD SERIES

Specification

DESIGNATION OF SERIES

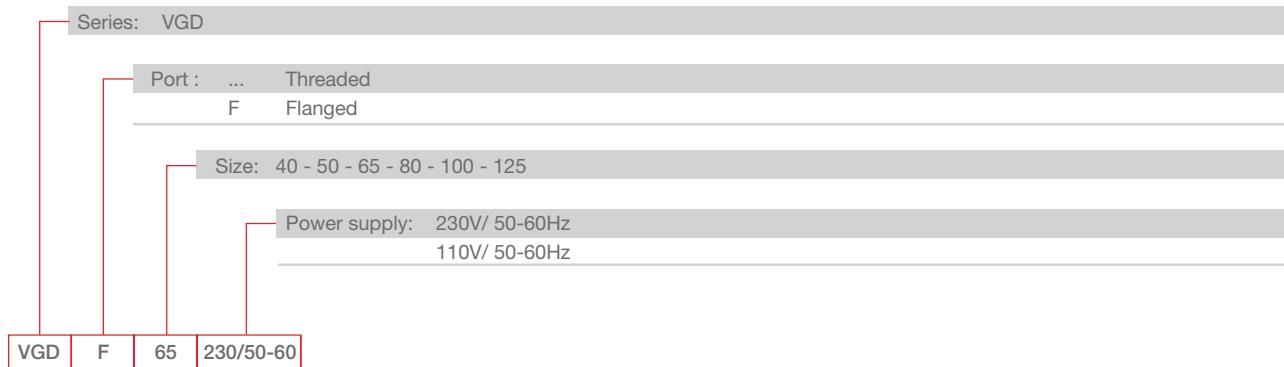


Pressure Regulating-Reducing Units / Safety-Regulating Gas Trains / Safety-Regulating Proportional Gas Trains

HPRT - LPRT - CB - MBC - VGD SERIES

Specification

DESIGNATION OF SERIES



STATE OF SUPPLY

HPRT series

High pressure regulating/reducing unit, for gas of 1st - 2nd - 3rd family, with max. inlet pressure of 4 bar made up of:

- 1 manual shut-off valve (ball valve)
- 1 gas filter with filtering degree lower than 50 µm
- 1 gas pressure gauge, with shut-off push-button cock, located upstream to the regulator
- 2 connection stubs
- 1 pressure regulator-stabilizer
- 1 slam-shut valve
- 1 gas pressure gauge, with shut-off push-button cock, located downstream to the regulator
- 2 pipelines for sensing line
- 1 vent valve
- 1 antivibrating joint
- Nipples (in threaded version)
- Gaskets (in flanged version)
- Fixing screws (in flanged version).

LPRT series

Low pressure regulating/reducing unit, for gas of 1st - 2nd - 3rd family, with max. inlet pressure of 500 mbar made up of:

- 1 manual shut-off valve (ball valve)
- 1 gas filter with filtering degree lower than 50 µm
- 1 gas pressure gauge, with shut-off push-button cock, located upstream to the regulator
- 1 pressure regulator-stabilizer
- 1 anti-vibrating joint
- Nipples (in threaded version)
- Gaskets (in flanged version)
- Fixing screws (in flanged version).

Standard equipment:

- Instruction handbook for installation, use and maintenance
- Gaskets (in flanged version)
- Fixing screws (in flanged version)
- Terminals for electrical connection.

HPRT - LPRT - CB - MBC - VGD SERIES

Specification

STATE OF SUPPLY

CB series

Safety/regulating gas train for gas of 1st - 2nd - 3rd family, with MAX supply pressure of 500 mbar made up of:

- 1 gas filter with filtering degree lower than 50 µm
- 1 pressure regulator-stabilizer, for stabilizing gas inlet pressure to the burner with a ±5% max. tolerance respect the fixed value
- 1 valves unit composed from two automatic closing valves EN 161, class A, group 2, realized with double diaphragm technology, comprised in a single body and featured by:
 - fast closing and slow opening with adjustable fast stroke for initial gas volume
 - adjustable main delivery
 - anti-dust filter with net
- 1 minimum gas pressure switch that allows system working only with a suited pressure in the gas distribution line
- 1 automatic seal control with a release time of 10÷26 seconds (when equipped)
- Nipples (in threaded version)
- Gaskets (in flanged version)
- Fixing screws (in flanged version).

MBC series

Safety shut-off valve for gas of 1st - 2nd - 3rd family, with MAX supply pressure of 360 mbar for threaded version and 500 mbar for flanged version.

Gas train are composed of:

- 1 gas filter with filtering degree lower than 50 µm (inside for the threaded valve)
- 1 valves unit composed from two automatic closing valves EN 161, class A, group 2, realized with double diaphragm technology, comprised in a single body and featured by:
 - ant-dust filter with net
 - fast closing and slow opening
 - servo pressure regulator unit as per DIN EN 88 Class A Group 2
 - 1 automatic seal control with a release time of 10÷26 seconds (when equipped)
 - Gaskets (in flanged version)
 - Fixing screws (in flanged version).

Standard equipment:

- Instruction handbook for installation, use and maintenance
- Gaskets (in flanged version)
- Fixing screws (in flanged version)
- Electrical connection terminals whit plug.

VGD series

Safety shut-off valve for gas of 1st - 2nd - 3rd family, with MAX supply pressure of 500 mbar composed from:

- 1 valves unit composed from two automatic closing valves EN 161, class A, group 2, realized with double diaphragm technology, comprised in a single body and featured by:
 - fast closing and slow opening with adjustable fast stroke for initial gas volume
 - adjustable main delivery and proportional regulation
 - ant-dust filter with net
- 1 automatic seal control with a release time of 10÷26 seconds (when equipped)
- nipples (in threaded version)
- gaskets (in flanged version)
- fixing screws (in flanged version).

Standard equipment:

- instruction handbook for installation, use and maintenance
- gaskets (in flanged version)
- fixing screws (in flanged version)
- electrical connection terminals.

Pressure Regulating-Reducing Units / Safety-Regulating Gas Trains / Safety-Regulating Proportional Gas Trains

HPRT - LPRT - CB - MBC - VGD SERIES

Available models

CODE	MODEL	IN	Ø	PRESSURE RANGES (mbar)		NOTE
				MAX INLET	OUTLET (4)	
3090650	HPRT 80	1"1/2	1"1/2	4000	27-60	-
3090843	HPRT 160	1"1/2	2"	4000	27-60	-
3090844	HPRT 250	2"	DN 65	4000	65-120	-
3090768	HPRT 500	DN 65	DN 65	4000	100-200	-
3090857	HPRT 750	DN 80	DN 80	4000	100-200	-
3090870	HPRT 1000	DN 100	DN 100	4000	155-230	-
In progress	HPRT 1500	DN 100	DN 100	4000	150-220	-
3091033	HPRT 2000	DN 125	DN 125	4000	150-220	-
In progress	LPRT 40	3/4"	3/4"	500	10-30	-
In progress	LPRT 80	1"	1"	500	10-30	-
3090664	LPRT 160	1"1/2	1"1/2	500	10-30	-
In progress	LPRT 250	2"	2"	500	10-30	-
3090455	LPRT 500	DN 65	DN 65	500	10-30	-
3090604	LPRT 750	DN 80	DN 80	500	10-30	-
3090546	LPRT 1000	DN 100	DN 100	500	10-30	-
In progress	LPRT 1500	DN 125	DN 125	500	10-30	-
In progress	LPRT 2000	DN 150	DN 150	500	10-30	-
3970145	CB 40/1 230/50-60	1"1/2	1"1/2	500	10-30	(1)
3970146	CB 50/1 230/50-60	2"	2"	500	10-30	(1)
3970160	CB 50/1 CT 230/50-60	2"	2"	500	10-30	(2)
3970147	CBF 65/1 230/50-60	DN 65	DN 65	500	10-30	(1)
3970161	CBF 65/1 CT 230/50-60	DN 65	DN 65	500	10-30	(2)
3970148	CBF 80/1 230/50-60	DN 80	DN 80	500	10-30	(1)
3970162	CBF 80/1 CT 230/50-60	DN 80	DN 80	500	10-30	(2)
3970149	CBF 100/1 230/50-60	DN 100	DN 100	500	10-30	(1)
3970163	CBF 100/1 CT 230/50-60	DN 65	DN 65	500	10-30	(2)
3970196	CBF 125/1 CT 230/50-60	DN 125	DN 125	500	10-30	(2)
3090436	CBF 80/1 CQ 230/50-60	DN 80	DN 80	500	10-30	(3)
3090327	CBF 100/1 CQ 230/50-60	DN 100	DN 100	500	10-30	(3)
In progress	CBF 125/1 CQ 230/50-60	DN 125	DN 125	500	10-30	(3)
3970221	MBC 1200 SE 50	2"	2"	360	4-60	(1)
3970222	MBC 1900 SE 65 FC	DN 65	DN 65	500	20-40	(1)
3970223	MBC 3100 SE 80 FC	DN 80	DN 80	500	20-40	(1)
3970228	MBC 5000 SE 100 FC	DN 100	DN 100	500	40-80	(1)
3970225	MBC 1200 SE 50 CT	2"	2"	360	4-60	(2)
3970226	MBC 1900 SE 65 FC CT	DN 65	DN 65	500	20-40	(2)
3970227	MBC 3100 SE 80 FC CT	DN 80	DN 80	500	20-40	(2)
3970229	MBC 5000 SE 100 FC CT	DN 100	DN 100	500	40-80	(2)
3970215	VGD 50	2"	DN 80	500	proportional	(5)
3970212	VGDF 65	2"	DN 80	500	proportional	(5)
3970213	VGDF 80	DN 65	DN 80	500	proportional	(5)
3970214	VGDF 100	DN 65	DN 80	500	proportional	(5)

(1) Seal control accessory

(2) Seal control incorporated

(3) Seal control on control panel

(4) For CB, LPRT and MBC units, for different outlet pressure ranges, it is possible to match the correct springs selecting them from accessories section

(5) gas trains suitable to MB SP BLU and RS/P BLU burners only.

Accessories

Springs for pressure regulators



Accessories springs are available for varying pressure range of the regulator-stabilizer included in the regulating/reducing unit or in MBC train.

In the following table, the springs are listed with their application range.

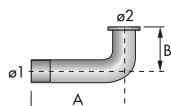
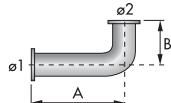
TYPE	SPRING	PORT	OUTLET PRESSURE (mbar)	CODE
► LPRT 40	red	Rp 3/4"	25÷55	in progress
► LPRT 40	yellow	Rp 3/4"	30÷70	in progress
► LPRT 40	black	Rp 3/4"	60÷110	in progress
► LPRT 40	pink	Rp 3/4"	90÷150	in progress
► LPRT 80	red	Rp 1"	25÷55	in progress
► LPRT 80	yellow	Rp 1"	30÷70	in progress
► LPRT 80	black	Rp 1"	60÷110	in progress
► LPRT 80	pink	Rp 1"	90÷150	in progress
► LPRT 160	CB 40	red	Rp 1"1/2	25÷55
► LPRT 160	CB 40	yellow	Rp 1"1/2	30÷70
► LPRT 160	CB 40	black	Rp 1"1/2	60÷110
► LPRT 160	CB 40	pink	Rp 1"1/2	90÷150
► LPRT 250	CB 50	red	Rp 2"	25÷55
► LPRT 250	CB 50	yellow	Rp 2"	30÷70
► LPRT 250	CB 50	black	Rp 2"	60÷110
► LPRT 250	CB 50	pink	Rp 2"	90÷150
► LPRT 500/750	CBF 65/80	red	DN 65/80	25÷55
► LPRT 500/750	CBF 65/80	yellow	DN 65/80	30÷70
► LPRT 500/750	CBF 65/80	black	DN 65/80	60÷110
► LPRT 500/750	CBF 65/80	pink	DN 65/80	100÷150
► LPRT 500/750	CBF 65/80	grey	DN 65/80	140÷200
► LPRT 1000	CBF 100	red	DN 100	25÷55
► LPRT 1000	CBF 100	yellow	DN 100	30÷70
► LPRT 1000	CBF 100	black	DN 100	60÷110
► LPRT 1000	CBF 100	pink	DN 100	100÷150
► LPRT 1000	CBF 100	grey	DN 100	140÷200
► LPRT 1500	CBF 125	red	DN 125	25÷55
► LPRT 1500	CBF 125	yellow	DN 125	30÷70
► LPRT 1500	CBF 125	black	DN 125	60÷110
► LPRT 1500	CBF 125	pink	DN 125	100÷150
► LPRT 2000		red	DN 150	25÷55
► LPRT 2000		yellow	DN 150	30÷70
► LPRT 2000		black	DN 150	60÷110
► LPRT 2000		pink	DN 150	90÷150
► MBC series		neutral	DN 68÷100	0÷20
► MBC series		red	DN 68÷100	20÷40
► MBC series		black	DN 68÷100	40÷80
► MBC series		green	DN 68÷100	80÷150
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Pressure Regulating-Reducing Units / Safety-Regulating Gas Trains / Safety-Regulating Proportional Gas Trains

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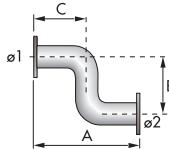
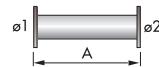
Accessories

Connection adapters



In some cases, an adapter must be fitted between the gas train and the burner, when the diameter of the gas train is different from the set diameter of the burner.
Below the available adapters that can be fitted are listed.

TYPE	Ø 1	Ø 2	A	B	CODE
► L 65/80 - 320	DN 65	DN 80	320	174	3000831
► L 65/65 - 320	DN 65	DN 65	320	129	20025934
► L 80/80 - 320	DN 80	DN 80	320	174	3000832
► L 80/65 - 320	DN 80	DN 65	320	174	3010352
► L 100/80 - 320	DN 100	DN 80	320	174	3010127
► L 2"/80	2"	DN 80	540	174	3010128
► L 100/100	DN 100	DN 100	320	174	3090680
► L125/100 - 320	DN 125	DN 100	320	174	3090679
► L 125/80 - 320	DN 125	DN 80	320	174	3090940
► L 100/65	DN 100	DN 65	320	174	3010353



TYPE	Ø 1	Ø 2	A	B	C	CODE
► I 65/80 - 320	DN 65	DN 80	320	-	-	3010221
► I 80/80 - 320	DN 80	DN 80	320	-	-	3010222
► I 100/80 - 320	DN 100	DN 80	320	-	-	3010223
► I 125/80 - 320	DN 125	DN 80	320	-	-	3010224
► Z 65/80 - 400/480/225	DN 65	DN 80	400	480	225	3010225
► Z 80/80 - 400/480/225	DN 80	DN 80	400	480	225	3010226
► Z 100/80 - 400/480/225	DN 100	DN 80	400	480	225	3010227
► Z 125/80 - 500/480/300	DN 125	DN 80	500	480	300	3010228

Manual valves



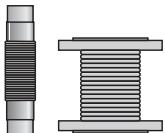
Ball shut-off manual valves are available in different sizes and listed in the following table.

MODEL	MAX OPERATING PRESSURE (bar)	PORT	CODE
► GBV 1/2"	5	1/2"	in progress
► GBV 3/4"	5	3/4"	3090097
► GBV 1"	5	1"	3090967
► GBV 1"1/2	5	1"1/2	3090143
► GBV 2"	5	2"	3090968
► GBV DN65	16	DN65	3090947
► GBV DN80	16	DN80	3090969
► GBV DN100	16	DN100	3090962
► GBV DN125	16	DN125	3091065
► GBV DN150	16	DN150	in progress

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Accessories

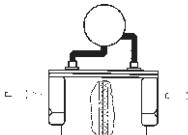
Anti-vibrating joints



Anti-vibrating joints to damp vibrations and facilitate application of the gas train to the gas distribution line are available in different sizes listed in the table below.

TYPE	PORT SIZE	INLET MAX PRESSURE (bar)	CODE
► GA 20	3/4"	6	3891033
► GA 25	1"	6	3891034
► GA 40	1"1/2	6	3891043
► GA 50	2"	6	3891053
► GAF 65	DN65	6	3891013
► GAF 80	DN80	6	3891003
► GAF 100	DN100	6	3891023
► GAF 125	DN125	6	3091092

Filters



A series of gas filters of different sizes are available and listed in the following table.

TYPE	PORT IN/OUT	INLET MAX PRESSURE (bar)	CODE
► GF515/1	1"1/2	0,5	3012198
► GF520/1	2"	0,5	3012199
► GF40065/3	DN 65	4	3012200
► GF40080/3	DN 80	4	3012201
► GF40100/3	DN 100	4	3012202
► GF40125	DN 125	4	3013141

Pressure regulators



A series of pressure regulators of different sizes are available and listed in the following table.

TYPE	PORT IN/OUT	INLET MAX PRESSURE (bar)	CODE
► FRS 515	1"1/2	0,5	3012203
► FRS 520	2"	0,5	3012204
► FRS 5065	DN 65	0,5	3012205
► FRS 5080	DN 80	0,5	3012206
► FRS 5100	DN 100	0,5	3012207
► FRS 5125	DN 125	0,5	on demand

Pressure Regulating-Reducing Units / Safety-Regulating Gas Trains / Safety-Regulating Proportional Gas Trains

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Accessories

Pressure gauge kit + push-button cock



A kit composed from a pressure gauge and a push-button cock for measuring gas pressure is available in different sizes following the table.

MODEL	MAX PRESSURE (mbar)	CODE
► NGPG 1	60	3090062
► NGPG 2	100	3091805
► NGPG 3	300	3091491
► NGPG 4	500	3090099
► NGPG 5	1000	in progress
► NGPG 6	2000	in progress
► NGPG 7	3000	in progress
► NGPG 8	4000	in progress

Gas pressure switch for seal control installed on the control panel



A gas pressure switch is available as seal control accessory to be installed on the control panel.

MODEL	SETTING RANGE ΔP (mbar)	CODE
► GW 1500	300 ÷ 1500	in progress
► GW 6000	1000 ÷ 6000	in progress

Seal control kit VPS 504



A seal control kit is available as accessory to be installed on the gas train to verify seal control.

GAS TRAIN	CODE
► MBC type	3010123
► CB type	3010125
► VGD type	3010367