I Abbinamento bruciatore - rampa gas
D Verbindung Brenner - Gasstrecke
F Accouplement brûleur - rampe gaz
GB Burner combined with gas train
E Combinación quemador - rampa de gas
NL Combinatie brander - gasstraat

MODELLO - MODELL - MODÈLE MODEL - MODELO
RS 1300-1600-2000/E-/EV BLU
RS 1300-1600-2000/E-/EV C01
RLS 1300-1600-2000/E-/EV C11
RLS 1300-1600-2000/E-/EV C13

20129688 (1) - 01/2017

Istruzioni originali
Übersetzung der Originalen Anleitungen
Traduction des instructions d’origine
Translation of the original instructions
Vertaling van de originele instructies
Traducción de las instrucciones originales

1 Abbinamento bruciatore - rampa gas

1.1 Designazione rampa gas

Serie:	MB	
	MBC	
	DMV	
	DMV12	
	VGD	
	CB	
	CBH	
	MV	
	CG	

Grandezza costruttiva:		405	407	410	412	415	420						
			65	120	300	700	1200	-	1900	3100	5000		
		505	507	510	512	-	520	525	5065	5080	50100	50125	50150
	10	15	20	32	40	-	50	-	65	80	100	125	150
			120	220									

Funzionamento:	/S	solo funzione ON-OFF
	/1	apertura 1 gradino
	/2	apertura 2 gradini
	/P	apertura 1 gradino con regolatore proporzionale aria/gas

Controllo di tenuta:	-	0
	CT	controllo di tenuta a bordo rampa
	CQ	con pressostato per controllo di tenuta

Tipo giunzione:	R	filettato
	F	flangia standard ISO
	F1	flangia quadrata BS1
	F2	flangia quadrata BS2
	F3	flangia quadrata BS3 - BS4

Connessione elettrica:	T	Terminali - Morsettiera
	SD	Spina domestica
	SM	Spina media potenza

Campo pressione uscita standard:	-	senza regolatore di pressione
	0	con regolatore e pressione proporzionale aria/gas
	2	con regolatore e pressione uscita fino a 20 mbar
	3	con regolatore e pressione uscita fino a 30 mbar
	4	con regolatore e pressione uscita fino a 40 mbar
	5	con regolatore e pressione uscita fino a 50 mbar
	6	con regolatore e pressione uscita fino a 60 mbar
	8	con regolatore e pressione uscita fino a 80 mbar
	15	con regolatore e pressione uscita fino a 150 mbar

Comando valvole:	0	comune
	2	separato

CB	5011	/1	CT	F	SM	3	0

DESIGNAZIONE BASE

DESIGNAZIONE ESTESA

1.2 Rampa gas

Rampa gas				KIT VPS	KIT CQ	Adattatore		
Codice	Modello	Ø	♦	Codice	Codice	Codice		
						RS-RLS 1300	RS 1600 - 2000	RLS 1600 - 2000
3970223	MBC 3100/1 - FSM 40	DN 80	-	3010367	3010344	20130713	20130602	-
3970227	MBC 3100/1 CT FSM 40	DN 80	**CT**	-	-	20130713	20130602	-
20093449	MBC 3100/1 CQ FSM 40	DN 80	**CQ**	-	-	20130713	20130602	-
3970224	MBC 5000/1 - FSM 80	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970228	MBC 5000/1 CT FSM 80	DN 100	**CT**	-	-	20130602	20130616	3090680
20093452	MBC 5000/1 CQ FSM 80	DN 100	**CQ**	-	-	20130602	20130616	3090680
3970149	CB 50100/1 - FSM 30	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970163	CB 50100/1 CT FSM 30	DN 100	**CT**	-	-	20130602	20130616	3090680
20015871	CB 50125/1 - FSM 30	DN 125	-	3010367	3010344	20130606	20130617	3090679
3970196	CB 50125/1 CT FSM 30	DN 125	**CT**	-	-	20130606	20130617	3090679
20043047	DMV 50100/1 - FSM -0	DN 100	-	3010367	3010344	20130602	20130616	3090680
20043048	DMV 50100/1 CT FSM -0	DN 100	**CT**	-	-	20130602	20130616	3090680
20043049	DMV 50100/1 CQ FSM -2	DN 100	**CQ**	-	-	20130602	20130616	3090680
20043050	DMV 50125/1 - FSM -0	DN 125	-	3010367	3010344	20130606	20130617	3090679
20043051	DMV 50125/1 CT FSM -0	DN 125	**CT**	-	-	20130606	20130617	3090679
20043052	DMV 50125/1 CQ FSM -2	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130030	VGD 40.80	DN 80	**CQ**	-	-	20130713	20130602	-
20130031	VGD 40.100	DN 100	**CQ**	-	-	20130602	20130616	3090680
20130032	VGD 40.125	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130033	VGD 40.150	DN 150	**CQ**	-	-	-	20130039	20130039

Tab. A

Legenda (Tab. A)

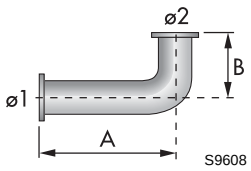
♦ Dispositivo controllo tenuta valvole gas:
- – rampa priva del dispositivo di controllo tenuta; dispositivo che può essere ordinato a parte, vedi colonna VPS, ed installato successivamente.
- **CT** rampa con il dispositivo di controllo tenuta VPS installato per bruciatori /M.
- **CQ** rampa con pressostato per controllo di tenuta bruciatori /E e /EV.

KIT VPS Dispositivo di controllo tenuta valvole. Fornito su richiesta separatamente dalla rampa gas.

KIT CQ Pressostato aggiuntivo per controllo di tenuta in abbinamento ai bruciatori /E e /EV.

● Rampa gas non disponibile o non adatta per l'abbinamento al bruciatore.

1.3 Adattatore

Adattatore	Codice	Ø 1	Ø 2	A	B
	3090680	DN 100	DN 100	320	174
	20130616	DN 100	DN 100	350	350
	3090679	DN 125	DN 100	320	174
	20130617	DN 125	DN 100	350	350
	20130039	DN 150	DN 100	320	320
	20130602	DN 100	DN 80	350	350
	20130606	DN 125	DN 80	350	350
	20130713	DN 80	DN 80	350	350

Tab. B

1.4 Molla per regolatore di pressione

Per variare il campo di pressione del regolatore della rampa gas sono disponibili i modelli di molla sotto riportati.

Rampa gas	Molla		
	Colore	Campo di pressione	Codice
MBC 3100/1* MBC 5000/1*	Bianco	4 - 20 mbar	3010381
	Rosso	20 - 40 mbar	3010382
	Nero	40 - 80 mbar	3010383
	Verde	80 - 150 mbar	3010384
CB 50100/1 * DMV 50100/1 *	Rosso	25 - 55 mbar	3010134
	Nero	60 - 110 mbar	3010136
	Rosa	100 - 150 mbar	3090489
	Grigio	140 - 200 mbar	3092174
CB 50125/1* DMV 50125/1*	Rosso	25 - 55 mbar	3010315
	Giallo	30 - 70 mbar	3010316
	Nero	60 - 110 mbar	3010317
	Rosa	100 - 150 mbar	3010318

Tab. C

* Con e senza controllo di tenuta

1.5 Diagrammi perdite di carico

I diagrammi indicano le perdite di pressione minima del bruciatore in abbinamento con le rampe gas con utilizzo di gas naturale G20 e G25.

I valori sono misurati alla presa di pressione gas della testa di combustione (vedi manuale d'istruzione del bruciatore).

A questi valori aggiungere la pressione della camera di combustione; i valori così calcolati rappresentano la pressione minima di ingresso alla rampa.

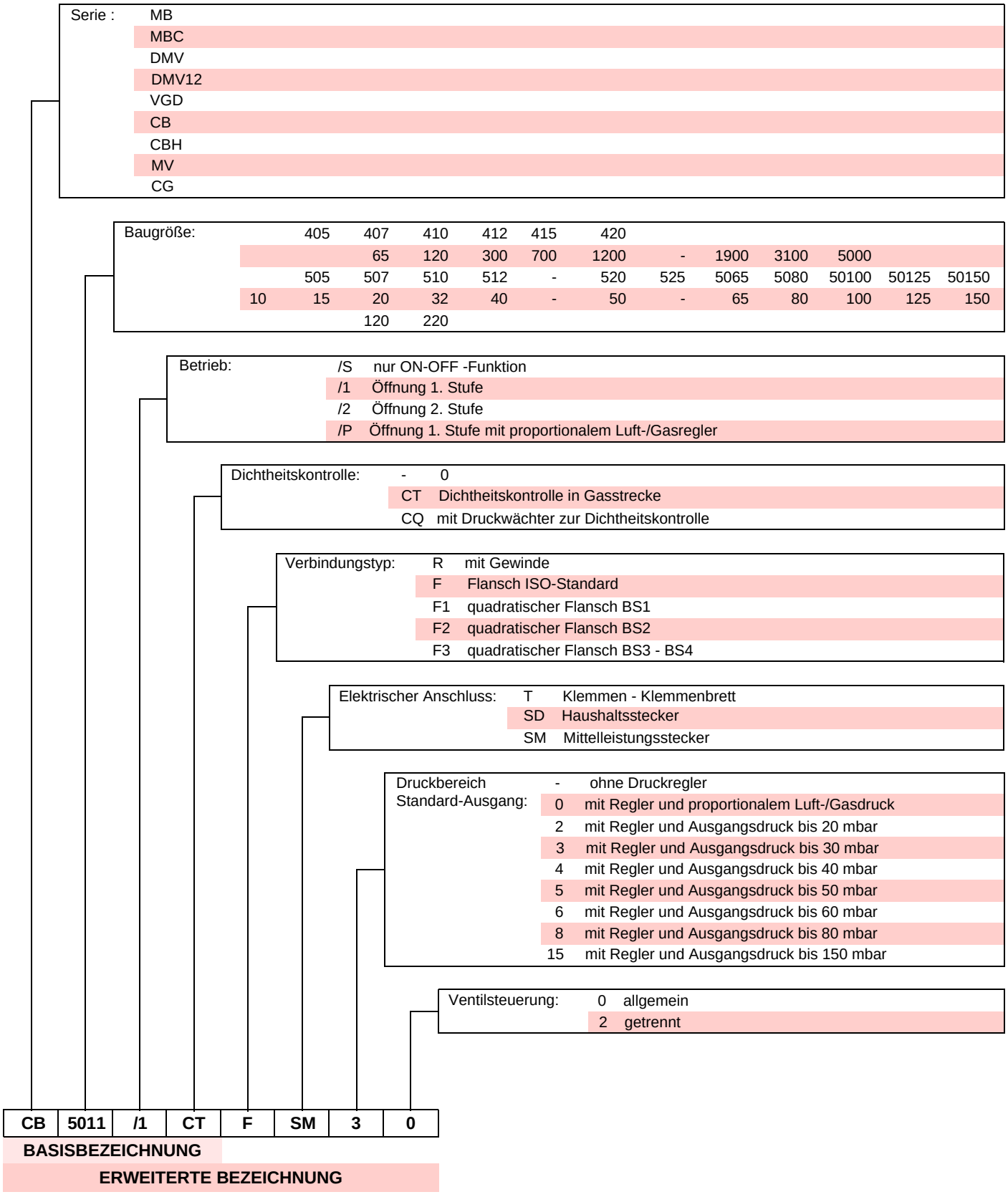
ATTENZIONE

Per valori di pressione differenti da quelli indicati contattare il Servizio Tecnico.

I valori riportati si riferiscono a:
– gas naturale G 20 - PCI 9,45 kWh/Sm^3 (8,2 Mcal/Sm^3)
– gas naturale G 25 - PCI 8,13 kWh/Sm^3 (7,0 Mcal/Sm^3)

1 Verbindung Brenner - Gasstrecke

1.1 Bezeichnung Gasstrecke



1.2 Gasstrecke

Gasstrecke				KIT VPS	KIT CQ	Adapter		
Code	Modell	Ø	♦	Code	Code	Code		
						RS-RLS 1300	RS 1600 - 2000	RLS 1600 - 2000
3970223	MBC 3100/1 - FSM 40	DN 80	-	3010367	3010344	20130713	20130602	-
3970227	MBC 3100/1 CT FSM 40	DN 80	**CT**	-	-	20130713	20130602	-
20093449	MBC 3100/1 CQ FSM 40	DN 80	**CQ**	-	-	20130713	20130602	-
3970224	MBC 5000/1 - FSM 80	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970228	MBC 5000/1 CT FSM 80	DN 100	**CT**	-	-	20130602	20130616	3090680
20093452	MBC 5000/1 CQ FSM 80	DN 100	**CQ**	-	-	20130602	20130616	3090680
3970149	CB 50100/1 - FSM 30	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970163	CB 50100/1 CT FSM 30	DN 100	**CT**	-	-	20130602	20130616	3090680
20015871	CB 50125/1 - FSM 30	DN 125	-	3010367	3010344	20130606	20130617	3090679
3970196	CB 50125/1 CT FSM 30	DN 125	**CT**	-	-	20130606	20130617	3090679
20043047	DMV 50100/1 - FSM -0	DN 100	-	3010367	3010344	20130602	20130616	3090680
20043048	DMV 50100/1 CT FSM -0	DN 100	**CT**	-	-	20130602	20130616	3090680
20043049	DMV 50100/1 CQ FSM -2	DN 100	**CQ**	-	-	20130602	20130616	3090680
20043050	DMV 50125/1 - FSM -0	DN 125	-	3010367	3010344	20130606	20130617	3090679
20043051	DMV 50125/1 CT FSM -0	DN 125	**CT**	-	-	20130606	20130617	3090679
20043052	DMV 50125/1 CQ FSM -2	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130030	VGD 40.80	DN 80	**CQ**	-	-	20130713	20130602	-
20130031	VGD 40.100	DN 100	**CQ**	-	-	20130602	20130616	3090680
20130032	VGD 40.125	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130033	VGD 40.150	DN 150	**CQ**	-	-	-	20130039	20130039

Tab. A

Zeichenerklärung (Tab. A)

♦ Dichtheitskontrolleinrichtung für Gasventile

– Gasstrecke ohne Dichtheitskontrolleinrichtung; Vorrichtung, die separat bestellt, siehe Spalte VPS, und nachträglich installiert werden kann.

CT Gasstrecke mit installierter Dichtheitskontrolleinrichtung VPS für Brenner /M.

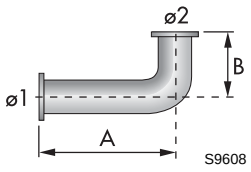
CQ Gasstrecke mit Druckwächter für Dichtheitskontroll der Brenner /E und /EV.

KIT VPS Dichtheitskontrolleinrichtung der Gasventile. Auf Anfrage gesondert von der Gasstrecke lieferbar.

KIT CQ Zusätzlicher Druckwächter für Dichtheitskontroll in Verbindung mit der Brenner /E und /EV.

● Gasstrecke nicht verfügbar oder nicht geeignet für die Verbingung an den Brenner.

1.3 Adapter

Adapter	Code	Ø 1	Ø 2	A	B
	3090680	DN 100	DN 100	320	174
	20130616	DN 100	DN 100	350	350
	3090679	DN 125	DN 100	320	174
	20130617	DN 125	DN 100	350	350
	20130039	DN 150	DN 100	320	320
	20130602	DN 100	DN 80	350	350
	20130606	DN 125	DN 80	350	350
	20130713	DN 80	DN 80	350	350

Tab. B

1.4 Feder für Druckregler

Für die Änderung des Druckbereichs des Reglers der Gasstrecke sind nachstehende Federmodelle verfügbar.

Gasstrecke	Feder		
	Farbe	Druckbereich	Code
MBC 3100/1* MBC 5000/1*	Weiß	4 - 20 mbar	3010381
	Rot	20 - 40 mbar	3010382
	Schwarz	40 - 80 mbar	3010383
	Grün	80 - 150 mbar	3010384
CB 50100/1 * DMV 50100/1 *	Rot	25 - 55 mbar	3010134
	Schwarz	60 - 110 mbar	3010136
	Rosa	100 - 150 mbar	3090489
	Grau	140 - 200 mbar	3092174
CB 50125/1* DMV 50125/1*	Rot	25 - 55 mbar	3010315
	Gelb	30 - 70 mbar	3010316
	Schwarz	60 - 110 mbar	3010317
	Rosa	100 - 150 mbar	3010318

Tab. C

* Mit und ohne Dichtheitskontrolle

1.5 Lastverlust-Diagramme

Die Diagramme geben die Verluste des Mindestdrucks des Brenners in Verbindung mit Gasstrecken bei Verwendung von Erdgas G20 und G25.

Die Werte werden am Gasdruckanschluss des Flammkopfs gemessen (siehe Betriebsanleitung des Brenners).

Diesen Werten muss der Druckwert der Brennkammer zugerechnet werden. Die sich daraus errechnenden Werte stellen den Mindestdruck am Eingang der Gasstrecke dar.

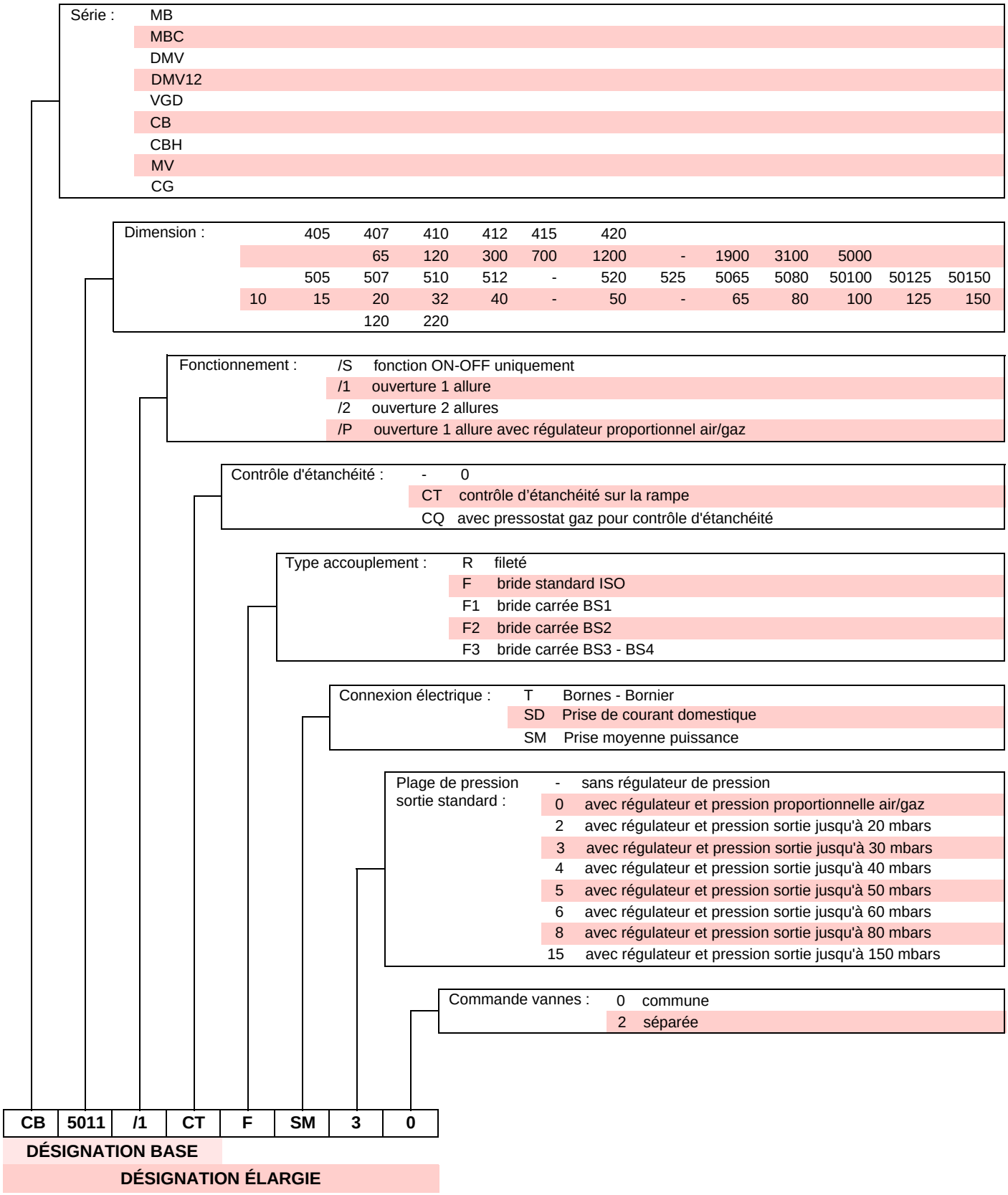
ACHTUNG

Bei Druckwerten, die von den angegebenen abweichen, nehmen Sie bitte Kontakt mit dem Technischen Kundendienst auf.

Die Werte beziehen sich auf:
– Erdgas G 20 - PCI 9,45 kWh/Sm^3 (8,2 Mcal/Sm^3)
– Erdgas G 25 - PCI 8,13 kWh/Sm^3 (7,0 Mcal/Sm^3)

1 Accouplement brûleur - rampe gaz

1.1 Désignation rampe gaz



1.2 Rampe gaz

Rampe gaz				KIT VPS	KIT CQ	Adaptateur		
Code	Modèle	Ø	♦	Code	Code	Code		
						RS-RLS 1300	RS 1600 - 2000	RLS 1600 - 2000
3970223	MBC 3100/1 - FSM 40	DN 80	-	3010367	3010344	20130713	20130602	-
3970227	MBC 3100/1 CT FSM 40	DN 80	**CT**	-	-	20130713	20130602	-
20093449	MBC 3100/1 CQ FSM 40	DN 80	**CQ**	-	-	20130713	20130602	-
3970224	MBC 5000/1 - FSM 80	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970228	MBC 5000/1 CT FSM 80	DN 100	**CT**	-	-	20130602	20130616	3090680
20093452	MBC 5000/1 CQ FSM 80	DN 100	**CQ**	-	-	20130602	20130616	3090680
3970149	CB 50100/1 - FSM 30	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970163	CB 50100/1 CT FSM 30	DN 100	**CT**	-	-	20130602	20130616	3090680
20015871	CB 50125/1 - FSM 30	DN 125	-	3010367	3010344	20130606	20130617	3090679
3970196	CB 50125/1 CT FSM 30	DN 125	**CT**	-	-	20130606	20130617	3090679
20043047	DMV 50100/1 - FSM -0	DN 100	-	3010367	3010344	20130602	20130616	3090680
20043048	DMV 50100/1 CT FSM -0	DN 100	**CT**	-	-	20130602	20130616	3090680
20043049	DMV 50100/1 CQ FSM -2	DN 100	**CQ**	-	-	20130602	20130616	3090680
20043050	DMV 50125/1 - FSM -0	DN 125	-	3010367	3010344	20130606	20130617	3090679
20043051	DMV 50125/1 CT FSM -0	DN 125	**CT**	-	-	20130606	20130617	3090679
20043052	DMV 50125/1 CQ FSM -2	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130030	VGD 40.80	DN 80	**CQ**	-	-	20130713	20130602	-
20130031	VGD 40.100	DN 100	**CQ**	-	-	20130602	20130616	3090680
20130032	VGD 40.125	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130033	VGD 40.150	DN 150	**CQ**	-	-	-	20130039	20130039

Tab. A

Légende ()

♦ Dispositif de contrôle d'étanchéité des vannes gaz :

– rampe sans dispositif de contrôle d'étanchéité ; le dispositif peut être commandé séparément, voir la colonne VPS, et installé après.

CT rampe avec dispositif de contrôle d'étanchéité VPS déjà installé pour brûleur /M.

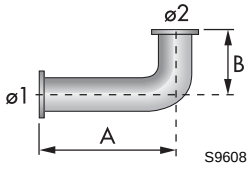
CQ rampe avec pressostat pour le contrôle d'étanchéité des brûleurs /E et /EV.

KIT VPS Dispositif de contrôle d'étanchéité des vannes. Fourni sur demande séparément de la rampe gaz.

KIT CQ Pressostat supplémentaire pour le contrôle d'étanchéité en combinaison avec des brûleurs /E et /EV.

● Rampe gaz pas disponible ou pas adapté pour l'accouplement au brûleur.

1.3 Adaptateur

Adaptateur	Code	Ø 1	Ø 2	A	B
	3090680	DN 100	DN 100	320	174
	20130616	DN 100	DN 100	350	350
	3090679	DN 125	DN 100	320	174
	20130617	DN 125	DN 100	350	350
	20130039	DN 150	DN 100	320	320
	20130602	DN 100	DN 80	350	350
	20130606	DN 125	DN 80	350	350
	20130713	DN 80	DN 80	350	350

Tab. B

1.4 Ressort pour régulateur de pression

Les modèles de ressort disponibles pour modifier la plage de pression du régulateur de la rampe gaz sont indiqués ci-dessous.

Rampe gaz	Ressort		
	Couleur	Plage de pression	Code
MBC 3100/1* MBC 5000/1*	Blanc	4 - 20 mbar	3010381
	Rouge	20 - 40 mbar	3010382
	Noir	40 - 80 mbar	3010383
	Vert	80 - 150 mbar	3010384
CB 50100/1 * DMV 50100/1 *	Rouge	25 - 55 mbar	3010134
	Noir	60 - 110 mbar	3010136
	Rose	100 - 150 mbar	3090489
	Gris	140 - 200 mbar	3092174
CB 50125/1* DMV 50125/1*	Rouge	25 - 55 mbar	3010315
	Jaune	30 - 70 mbar	3010316
	Noir	60 - 110 mbar	3010317
	Rose	100 - 150 mbar	3010318

Tab. C

* Avec et sans contrôle d'étanchéité

1.5 Diagrammes des pertes de charge

Les diagrammes indiquent les pertes de pression minimale du brûleur en accouplement avec les rampes gaz avec utilisation des gaz naturels G20 et G25.

Les valeurs sont mesurées au niveau de la prise de pression de gaz de la tête de combustion (se référer au manuel d'instructions du brûleur).

Ajouter la pression de la chambre de combustion à ces valeurs ; les valeurs ainsi calculées représentent la pression minimale d'entrée à la rampe.

ATTENTION

Pour des niveaux de pression différents de ceux indiqués s'adresser au Service Technique.

Les valeurs reportées se réfèrent à :

– gaz naturel G 20 PCI 9,45 kWh/Sm^3 (8,2 Mcal/Sm^3)
– gaz naturel G 25 PCI 8,13 kWh/Sm^3 (7,0 Mcal/Sm^3)

1 Burner combined with gas train

1.1 Gas train designation

Series:	MB
	MBC
	DMV
	DMV12
	VGD
	CB
	CBH
	MV
	CG

Size:		405	407	410	412	415	420						
			65	120	300	700	1200	-	1900	3100	5000		
		505	507	510	512	-	520	525	5065	5080	50100	50125	50150
	10	15	20	32	40	-	50	-	65	80	100	125	150
			120	220									

Operation:	/S	only ON-OFF function
	/1	1st stage mode opening
	/2	2nd stage mode opening
	/P	1st stage mode opening with air/gas proportional regulator

Leak detection control:	-	0
	CT	leak detection control device installed on the gas train
	CQ	equipped with pressure switch for leak detection control

Joint type:	R	threaded joint
	F	standard flange ISO
	F1	square flange BS1
	F2	square flange BS2
	F3	square flange BS3 - BS4

Electrical connection:	T	Terminals - Terminal strip
	SD	Domestic plug
	SM	Medium voltage plug

Standard output pressure range:	-	without pressure governor
	0	with governor and air/gas proportional pressure
	2	with governor and output pressure up to 20 mbar
	3	with governor and output pressure up to 30 mbar
	4	with governor and output pressure up to 40 mbar
	5	with governor and output pressure up to 50 mbar
	6	with governor and output pressure up to 60 mbar
	8	with governor and output pressure up to 80 mbar
	15	with governor and output pressure up to 150 mbar

Valve control:	0	shared
	2	separate

CB	5011	/1	CT	F	SM	3	0

BASIC DESIGNATION

EXTENDED DESIGNATION

1.2 Gas train

Gas train				VPS KIT	CQ KIT	Adapter		
Code	Model	Ø	♦	Code	Code	Code		
						RS-RLS 1300	RS 1600 - 2000	RLS 1600 - 2000
3970223	MBC 3100/1 - FSM 40	DN 80	-	3010367	3010344	20130713	20130602	-
3970227	MBC 3100/1 CT FSM 40	DN 80	**CT**	-	-	20130713	20130602	-
20093449	MBC 3100/1 CQ FSM 40	DN 80	**CQ**	-	-	20130713	20130602	-
3970224	MBC 5000/1 - FSM 80	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970228	MBC 5000/1 CT FSM 80	DN 100	**CT**	-	-	20130602	20130616	3090680
20093452	MBC 5000/1 CQ FSM 80	DN 100	**CQ**	-	-	20130602	20130616	3090680
3970149	CB 50100/1 - FSM 30	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970163	CB 50100/1 CT FSM 30	DN 100	**CT**	-	-	20130602	20130616	3090680
20015871	CB 50125/1 - FSM 30	DN 125	-	3010367	3010344	20130606	20130617	3090679
3970196	CB 50125/1 CT FSM 30	DN 125	**CT**	-	-	20130606	20130617	3090679
20043047	DMV 50100/1 - FSM -0	DN 100	-	3010367	3010344	20130602	20130616	3090680
20043048	DMV 50100/1 CT FSM -0	DN 100	**CT**	-	-	20130602	20130616	3090680
20043049	DMV 50100/1 CQ FSM -2	DN 100	**CQ**	-	-	20130602	20130616	3090680
20043050	DMV 50125/1 - FSM -0	DN 125	-	3010367	3010344	20130606	20130617	3090679
20043051	DMV 50125/1 CT FSM -0	DN 125	**CT**	-	-	20130606	20130617	3090679
20043052	DMV 50125/1 CQ FSM -2	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130030	VGD 40.80	DN 80	**CQ**	-	-	20130713	20130602	-
20130031	VGD 40.100	DN 100	**CQ**	-	-	20130602	20130616	3090680
20130032	VGD 40.125	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130033	VGD 40.150	DN 150	**CQ**	-	-	-	20130039	20130039

Tab. A

Key to layout (Tab. A)

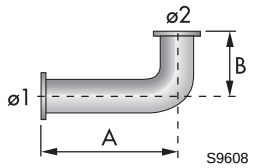
♦ Gas valve leak detection control device:
- – gas train not equipped with leak detection control device; this device can be ordered separately - see VPS column - and installed later.
- **CT** gas train equipped with VPS leak detection control device for burners /M.
- **CQ** gas train with pressure switch for leak detection control of burners /E and /EV.

VPS KIT Valve leak detection control device. Supplied separately from the gas train, on demand.

CQ KIT Additional pressure switch for leak detection control in combination with burners /E and /EV.

● Gas train not available or not suitable for the matching to the burner.

1.3 Adapter

Adapter	Code	Ø 1	Ø 2	A	B
	3090680	DN 100	DN 100	320	174
	20130616	DN 100	DN 100	350	350
	3090679	DN 125	DN 100	320	174
	20130617	DN 125	DN 100	350	350
	20130039	DN 150	DN 100	320	320
	20130602	DN 100	DN 80	350	350
	20130606	DN 125	DN 80	350	350
	20130713	DN 80	DN 80	350	350

Tab. B

1.4 Spring for pressure governor

The following are the available spring models which can be used to modify the gas train governor pressure range.

Gas train	Spring		
	Colour	Pressure range	Code
MBC 3100/1* MBC 5000/1*	White	4 - 20 mbar	3010381
	Red	20 - 40 mbar	3010382
	Black	40 - 80 mbar	3010383
	Green	80 - 150 mbar	3010384
CB 50100/1 * DMV 50100/1 *	Red	25 - 55 mbar	3010134
	Black	60 - 110 mbar	3010136
	Pink	100 - 150 mbar	3090489
	Grey	140 - 200 mbar	3092174
CB 50125/1* DMV 50125/1*	Red	25 - 55 mbar	3010315
	Yellow	30 - 70 mbar	3010316
	Black	60 - 110 mbar	3010317
	Pink	100 - 150 mbar	3010318

Tab. C

* Version available both with leak detection control device and without it

1.5 Pressure loss diagrams

The diagrams show the minimum pressure losses of the burner combined with trains using natural gas (G20 and G25).

Values are measured at combustion head pressure test point (see burner instruction manual).

Add to these values the combustion chamber pressure to get the minimum train input pressure.

WARNING

For pressure levels different from those indicated above, please contact the Technical Office.

The values indicated refer to:
– natural gas G 20 - PCI 9.45 kWh/Sm^3 (8.2 Mcal/Sm^3)
– natural gas G 25 - PCI 8.13 kWh/Sm^3 (7.0 Mcal/Sm^3)

1 Combinación quemador - rampa de gas

1.1 Designación rampa de gas

Serie :	MB
	MBC
	DMV
	DMV12
	VGD
	CB
	CBH
	MV
	CG

Tamaño constructivo:		405	407	410	412	415	420						
			65	120	300	700	1200	-	1900	3100	5000		
		505	507	510	512	-	520	525	5065	5080	50100	50125	50150
	10	15	20	32	40	-	50	-	65	80	100	125	150
			120	220									

Funcionamiento:	/S	sólo función ON-OFF
	/1	abertura 1º fase
	/2	abertura 2º fase
	/P	abertura 1º fase con regulador proporcional aire/gas

Control de estanqueidad:	-	0
	CT	control de estanqueidad de la rampa
	CQ	con presostato gas para control de estanqueidad

Tipo unión:	R	roscado
	F	brida estándar ISO
	F1	brida cuadrada BS1
	F2	brida cuadrada BS2
	F3	brida cuadrada BS3 - BS4

Conexión eléctrica:	T	Terminales - Regleta de conexión
	SD	Conector doméstico
	SM	Conector potencia media

Campo de presión salida estándar:	-	sin regulador de presión
	0	con regulador y presión proporcional aire/gas
	2	con regulador y presión salida hasta 20 mbar
	3	con regulador y presión salida hasta 30 mbar
	4	con regulador y presión salida hasta 40 mbar
	5	con regulador y presión salida hasta 50 mbar
	6	con regulador y presión salida hasta 60 mbar
	8	con regulador y presión salida hasta 80 mbar
	15	con regulador y presión salida hasta 150 mbar

Mando válvulas:	0	común
	2	separado

CB	5011	/1	CT	F	SM	3	0

DESIGNACIÓN BASE

DESIGNACIÓN AMPLIADA

1.2 Rampa de gas

Rampa de gas				KIT VPS	KIT CQ	Adaptador		
Código	Modelo	Ø	♦	Código	Código	Código		
						RS-RLS 1300	RS 1600 - 2000	RLS 1600 - 2000
3970223	MBC 3100/1 - FSM 40	DN 80	-	3010367	3010344	20130713	20130602	-
3970227	MBC 3100/1 CT FSM 40	DN 80	**CT**	-	-	20130713	20130602	-
20093449	MBC 3100/1 CQ FSM 40	DN 80	**CQ**	-	-	20130713	20130602	-
3970224	MBC 5000/1 - FSM 80	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970228	MBC 5000/1 CT FSM 80	DN 100	**CT**	-	-	20130602	20130616	3090680
20093452	MBC 5000/1 CQ FSM 80	DN 100	**CQ**	-	-	20130602	20130616	3090680
3970149	CB 50100/1 - FSM 30	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970163	CB 50100/1 CT FSM 30	DN 100	**CT**	-	-	20130602	20130616	3090680
20015871	CB 50125/1 - FSM 30	DN 125	-	3010367	3010344	20130606	20130617	3090679
3970196	CB 50125/1 CT FSM 30	DN 125	**CT**	-	-	20130606	20130617	3090679
20043047	DMV 50100/1 - FSM -0	DN 100	-	3010367	3010344	20130602	20130616	3090680
20043048	DMV 50100/1 CT FSM -0	DN 100	**CT**	-	-	20130602	20130616	3090680
20043049	DMV 50100/1 CQ FSM -2	DN 100	**CQ**	-	-	20130602	20130616	3090680
20043050	DMV 50125/1 - FSM -0	DN 125	-	3010367	3010344	20130606	20130617	3090679
20043051	DMV 50125/1 CT FSM -0	DN 125	**CT**	-	-	20130606	20130617	3090679
20043052	DMV 50125/1 CQ FSM -2	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130030	VGD 40.80	DN 80	**CQ**	-	-	20130713	20130602	-
20130031	VGD 40.100	DN 100	**CQ**	-	-	20130602	20130616	3090680
20130032	VGD 40.125	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130033	VGD 40.150	DN 150	**CQ**	-	-	-	20130039	20130039

Tab. A

Leyenda (Tab. A)

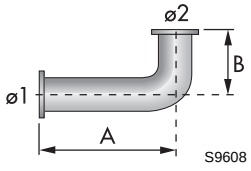
♦ Dispositivo de control de la estanqueidad válvulas de gas:
- – rampa sin el dispositivo de control de estanqueidad; dispositivo que puede pedirse por separado, ver columna VPS, e instalarse sucesivamente.
- **CT** rampa con el dispositivo de control de estanqueidad VPS instalado para quemadores /M.
- **CQ** rampa con presostato para el control de estanqueidad de quemadores /E y /EV.

KIT VPS Dispositivo de control de la estanqueidad de las válvulas. Se suministra aparte de la rampa de gas, sobre demanda.

KIT CQ Presostato adicional para el control de estanqueidad en combinación con quemadores /E y /EV.

● Rampa de gas no disponible o no adecuado para la combinación al quemador.

1.3 Adaptador

Adaptador	Code	Ø 1	Ø 2	A	B
	3090680	DN 100	DN 100	320	174
	20130616	DN 100	DN 100	350	350
	3090679	DN 125	DN 100	320	174
	20130617	DN 125	DN 100	350	350
	20130039	DN 150	DN 100	320	320
	20130602	DN 100	DN 80	350	350
	20130606	DN 125	DN 80	350	350
	20130713	DN 80	DN 80	350	350

Tab. B

1.4 Muelle para el regulador de presión

Para cambiar el campo de presión del regulador de la rampa de gas están disponibles los modelos de muelles indicados a continuación.

Rampa de gas	Muelle		
	Color	Campo de presión	Código
MBC 3100/1* MBC 5000/1*	Blanco	4 - 20 mbar	3010381
	Rojo	20 - 40 mbar	3010382
	Negro	40 - 80 mbar	3010383
	Verde	80 - 150 mbar	3010384
CB 50100/1 * DMV 50100/1 *	Rojo	25 - 55 mbar	3010134
	Negro	60 - 110 mbar	3010136
	Rosa	100 - 150 mbar	3090489
	Gris	140 - 200 mbar	3092174
CB 50125/1* DMV 50125/1*	Rojo	25 - 55 mbar	3010315
	Amarillo	30 - 70 mbar	3010316
	Negro	60 - 110 mbar	3010317
	Rosa	100 - 150 mbar	3010318

Tab. C

* Con y sin control de estanqueidad

1.5 Diagramas pérdida de presión

Los diagramas indican las pérdidas de presión mínimas del quemador combinadas con las rampas de gas utilizando gas natural G20 y G25.

Los valores son medidos en la toma de presión de gas del cabezal de combustión (ver manual de instrucciones del quemador).

A estos valores se le debe sumar la presión de la cámara de combustión; los valores calculados de esta manera representan la presión mínima de ingreso a la rampa.

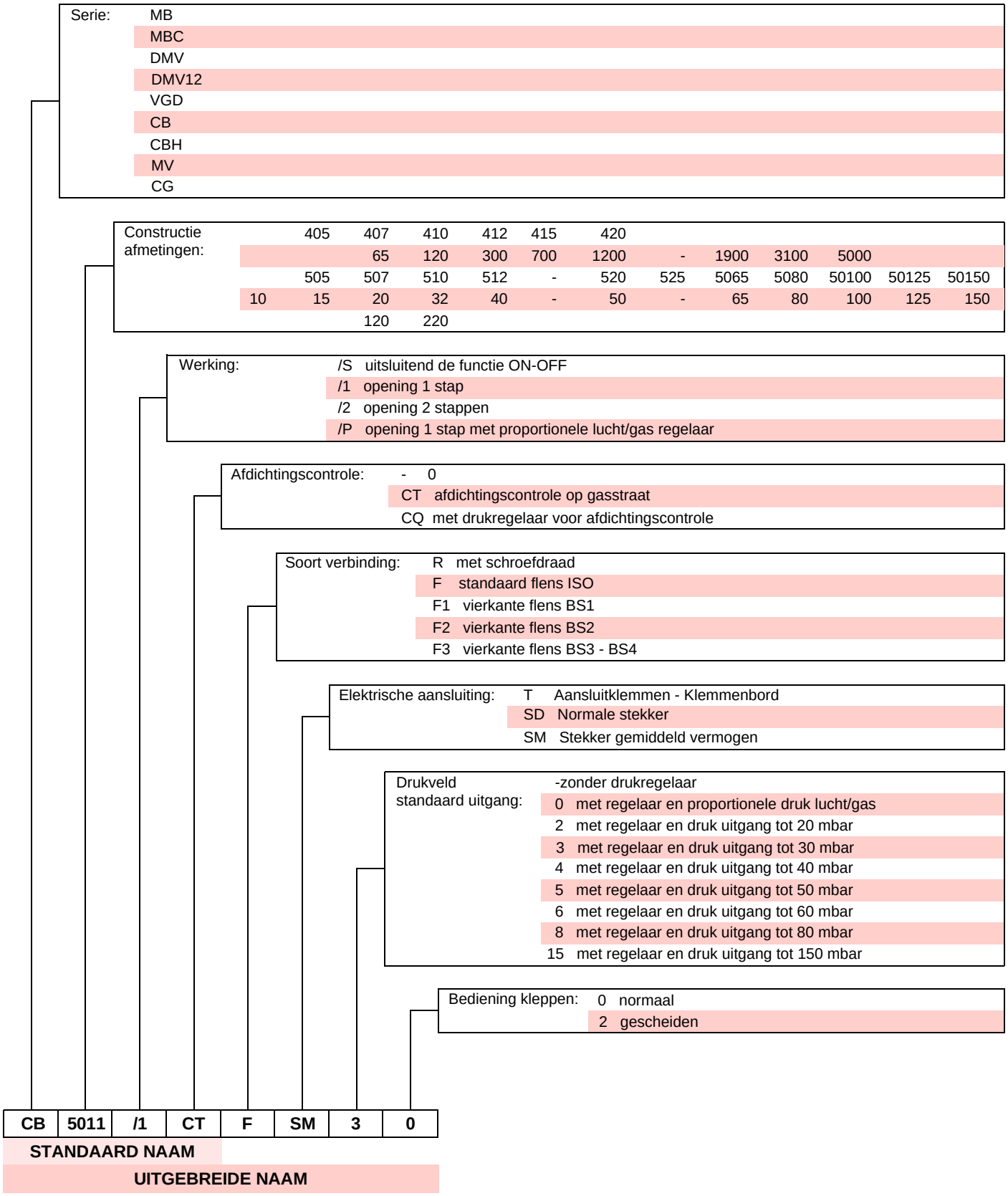
ATENCIÓN

Para niveles de presión diferentes, póngase en contacto con nuestro Servicio Técnico.

Los valores indicados se refieren a:
– gas natural G 20 - PCI 9,45 kWh/Sm^3 (8,2 Mcal/Sm^3)
– gas natural G 25 - PCI 8,13 kWh/Sm^3 (7,0 Mcal/Sm^3)

1 Combinatie brander - gasstraat

1.1 Aanduiding gasstraat



1.2 Gasstraat

Gasstraat				KIT VPS	KIT CQ	Adapter		
Code	Model	Ø	♦	Code	Code	Code		
						RS-RLS 1300	RS 1600 - 2000	RLS 1600 - 2000
3970223	MBC 3100/1 - FSM 40	DN 80	-	3010367	3010344	20130713	20130602	-
3970227	MBC 3100/1 CT FSM 40	DN 80	**CT**	-	-	20130713	20130602	-
20093449	MBC 3100/1 CQ FSM 40	DN 80	**CQ**	-	-	20130713	20130602	-
3970224	MBC 5000/1 - FSM 80	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970228	MBC 5000/1 CT FSM 80	DN 100	**CT**	-	-	20130602	20130616	3090680
20093452	MBC 5000/1 CQ FSM 80	DN 100	**CQ**	-	-	20130602	20130616	3090680
3970149	CB 50100/1 - FSM 30	DN 100	-	3010367	3010344	20130602	20130616	3090680
3970163	CB 50100/1 CT FSM 30	DN 100	**CT**	-	-	20130602	20130616	3090680
20015871	CB 50125/1 - FSM 30	DN 125	-	3010367	3010344	20130606	20130617	3090679
3970196	CB 50125/1 CT FSM 30	DN 125	**CT**	-	-	20130606	20130617	3090679
20043047	DMV 50100/1 - FSM -0	DN 100	-	3010367	3010344	20130602	20130616	3090680
20043048	DMV 50100/1 CT FSM -0	DN 100	**CT**	-	-	20130602	20130616	3090680
20043049	DMV 50100/1 CQ FSM -2	DN 100	**CQ**	-	-	20130602	20130616	3090680
20043050	DMV 50125/1 - FSM -0	DN 125	-	3010367	3010344	20130606	20130617	3090679
20043051	DMV 50125/1 CT FSM -0	DN 125	**CT**	-	-	20130606	20130617	3090679
20043052	DMV 50125/1 CQ FSM -2	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130030	VGD 40.80	DN 80	**CQ**	-	-	20130713	20130602	-
20130031	VGD 40.100	DN 100	**CQ**	-	-	20130602	20130616	3090680
20130032	VGD 40.125	DN 125	**CQ**	-	-	20130606	20130617	3090679
20130033	VGD 40.150	DN 150	**CQ**	-	-	-	20130039	20130039

Tab. A

Legenda (Tab. A)

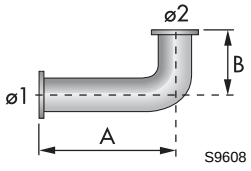
♦ Controlesysteem afdichting gaskleppen:
- – gasstraat zonder afdichting controlesysteem; dit systeem kan afzonderlijk besteld, zie de kolom VPS, en vervolgens geïnstalleerd worden.
- **CT** gasstraat met geïnstalleerd afdichting controlesysteem VPS voor branders /M.
- **CQ** gasstraat met drukschakelaar voor dichtingscontrole van branders /E en /EV.

KIT VPS Controlesysteem afdichting kleppen. Op aanvraag wordt dit systeem afzonderlijk van de gasstraat geïnstalleerd.

KIT CQ Extra drukschakelaar voor dichtingscontrole voor combinatie met de branders /E en /EV.

● Gasstraat niet beschikbaar is of niet geschikt voor combinatie aan de brander.

1.3 Adapter

Adapter	Code	Ø 1	Ø 2	A	B
	3090680	DN 100	DN 100	320	174
	20130616	DN 100	DN 100	350	350
	3090679	DN 125	DN 100	320	174
	20130617	DN 125	DN 100	350	350
	20130039	DN 150	DN 100	320	320
	20130602	DN 100	DN 80	350	350
	20130606	DN 125	DN 80	350	350
	20130713	DN 80	DN 80	350	350

Tab. B

1.4 Veer voor drukregelaar

De onderstaande modellen veren zijn beschikbaar om het drukveld van de regelaar van de gasstraat te variëren.

Gasstraat	Veer		
	Kleur	Drukveld	Code
MBC 3100/1* MBC 5000/1*	Wit	4 - 20 mbar	3010381
	Rood	20 - 40 mbar	3010382
	Zwart	40 - 80 mbar	3010383
	Groen	80 - 150 mbar	3010384
CB 50100/1 * DMV 50100/1 *	Rood	25 - 55 mbar	3010134
	Zwart	60 - 110 mbar	3010136
	Roze	100 - 150 mbar	3090489
	Grijs	140 - 200 mbar	3092174
CB 50125/1* DMV 50125/1*	Rood	25 - 55 mbar	3010315
	Geel	30 - 70 mbar	3010316
	Zwart	60 - 110 mbar	3010317
	Roze	100 - 150 mbar	3010318

Tab. C

* Met en zonder afdichtingscontrole

1.5 Diagrammen lading afname

De diagrammen geven de minimum drukafname van de brander aan in combinatie met de gasbuizen en het gebruik van aardgas G20 en G25.

De waarden worden gemeten aan de gasdruk aansluiting op de branderkop (zie de handleiding van de brander).

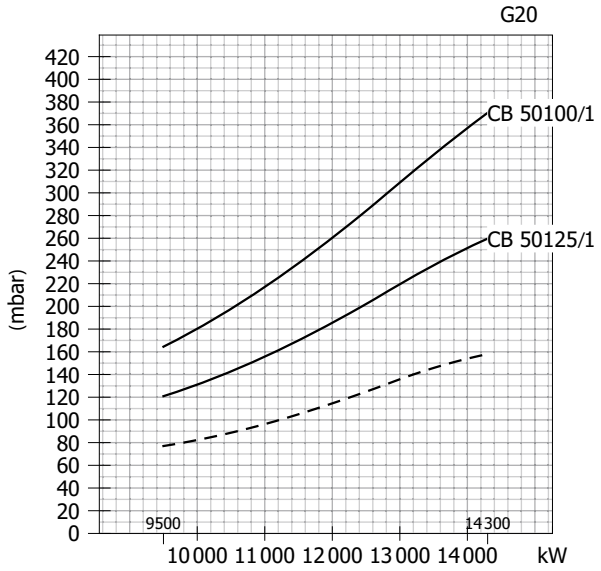
Voeg aan deze waarden de druk van de verbrandingskamer toe. De verkregen waarden geven de minimum druk aan de ingang van de gasstraat aan.

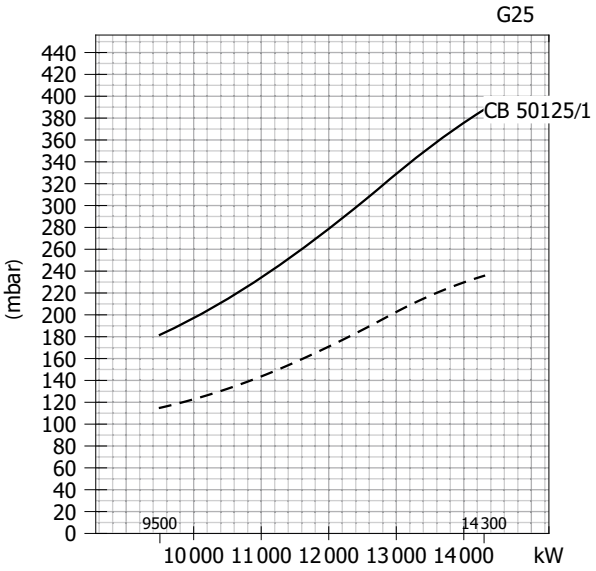
LET OP

Neem contact op met de Technische Assistentie als de drukwaarden afwijken van hetgeen vermeld is.

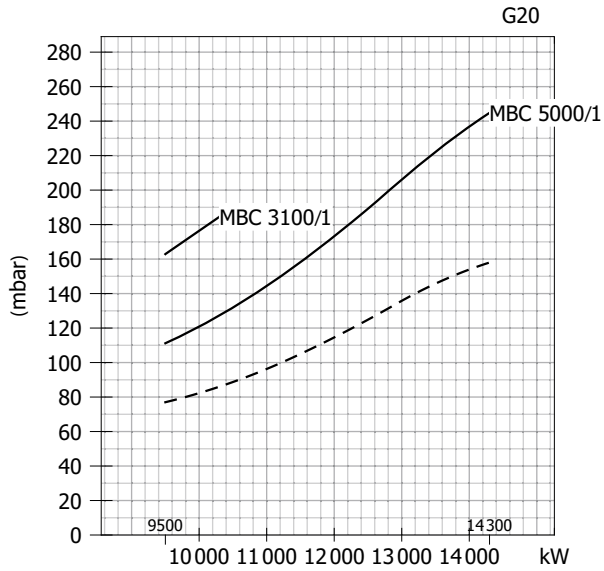
De aangegeven waarden verwijzen naar:
– aardgas G 20 - PCI 9,45 kWh/Sm^3 (8,2 Mcal/Sm^3)
– aardgas G 25 - PCI 8,13 kWh/Sm^3 (7,0 Mcal/Sm^3)

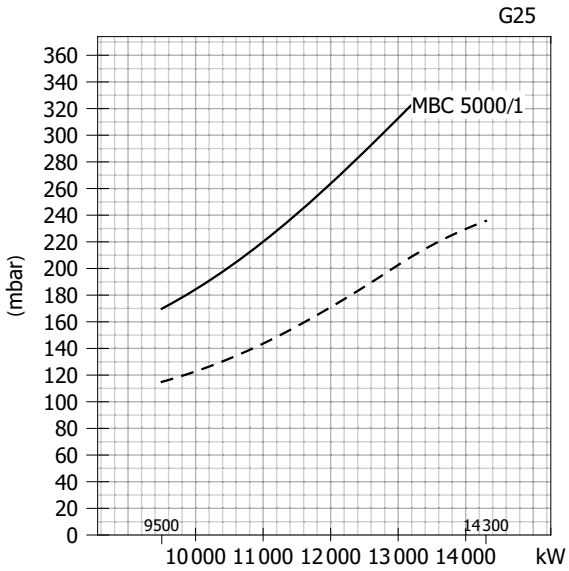
RS - RLS 1300/E - CB1



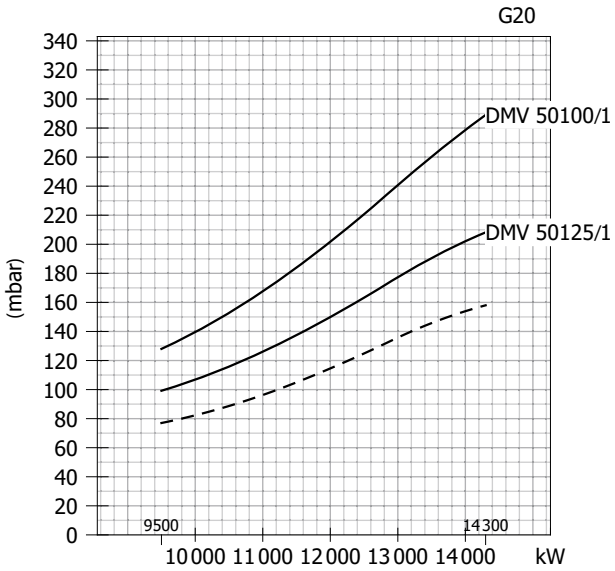


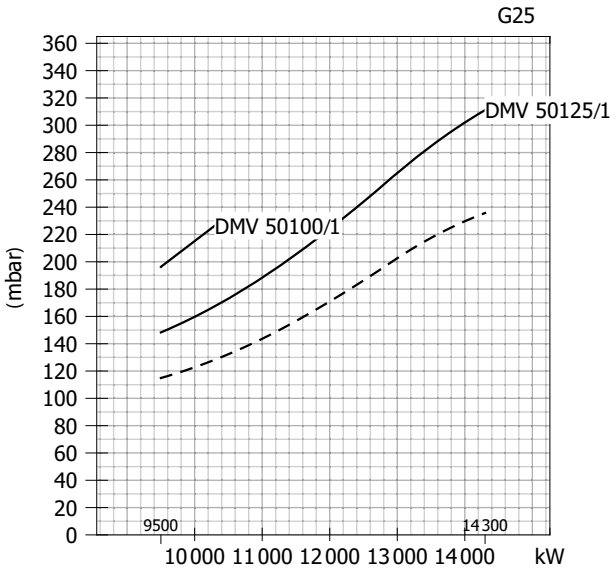
RS - RLS 1300/E - MBC





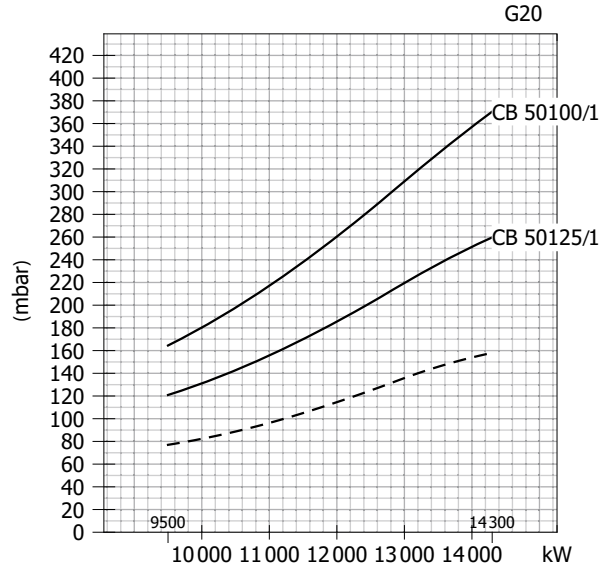
RS - RLS 1300/E - DMV

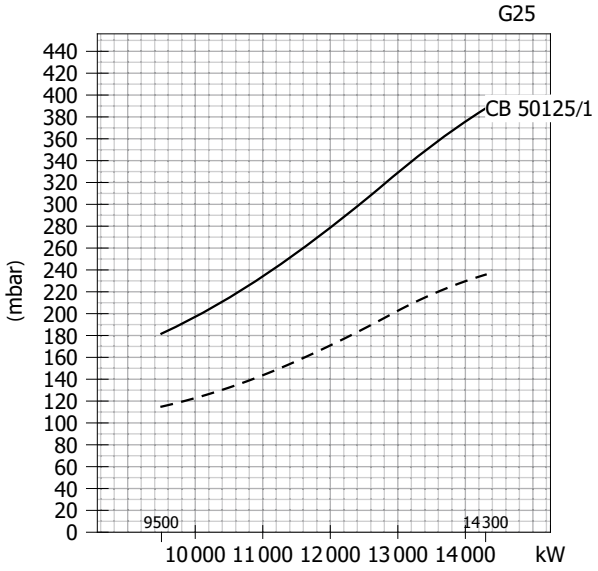




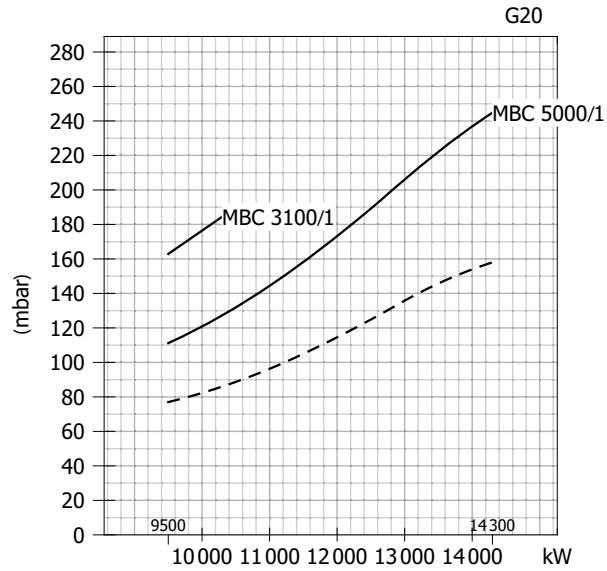
	I	D	F	GB	E	NL
	Perdite di pressione	**Druckverlust**	**Pertes de pression**	**Pressure loss**	**Pérdida de presión**	**Drukafname**
———	Testa di combustione + farfalla gas + rampa gas	Flammkopf + Gasdrossel + Gasstrecke	Tête de combustion + vanne papillon gaz + rampe gaz	Combustion head + gas butterfly valve + gas train	Cabezal de combustión + válvula de mariposa gas + rampa de gas	Verbrandingskop + gasklep + gasstraat
- - -	Testa di combustione + farfalla gas	Flammkopf + Gasdrossel	Tête de combustion + vanne papillon gaz	Combustion head + gas butterfly valve	Cabezal de combustión + válvula de mariposa gas	Verbrandingskop + gasklep

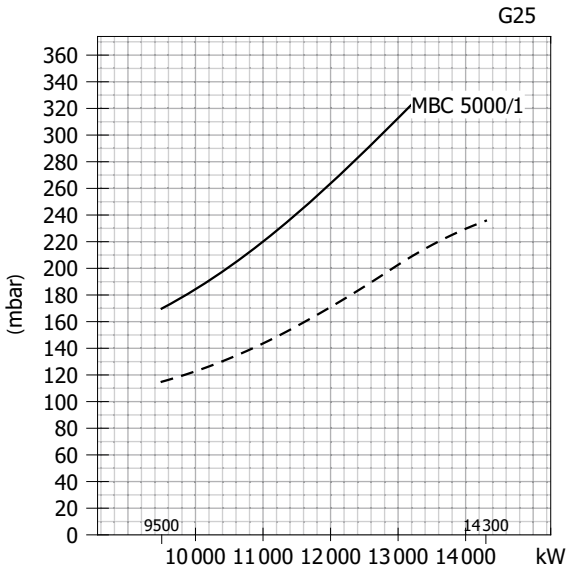
RS - RLS 1300/EV - CB1



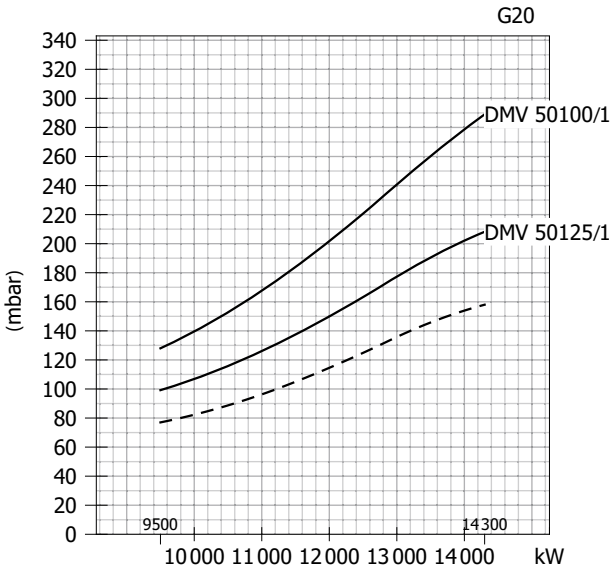


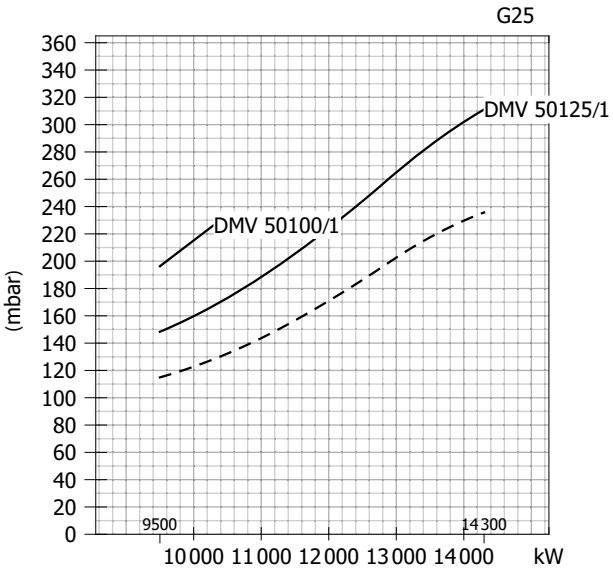
RS - RLS 1300/EV - MBC





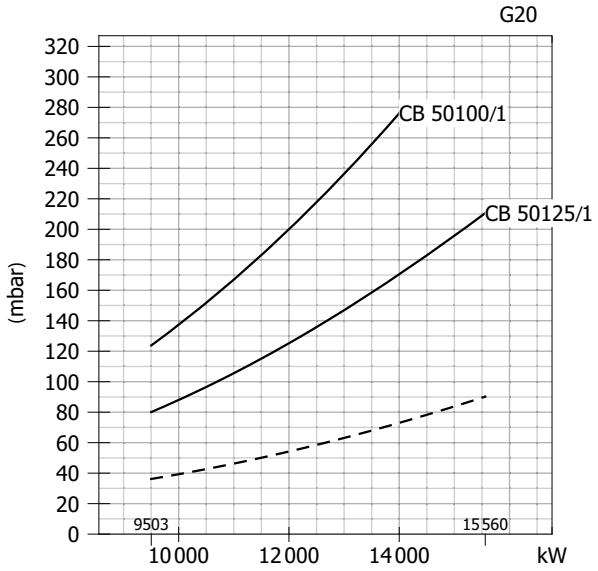
RS - RLS 1300/EV - DMV

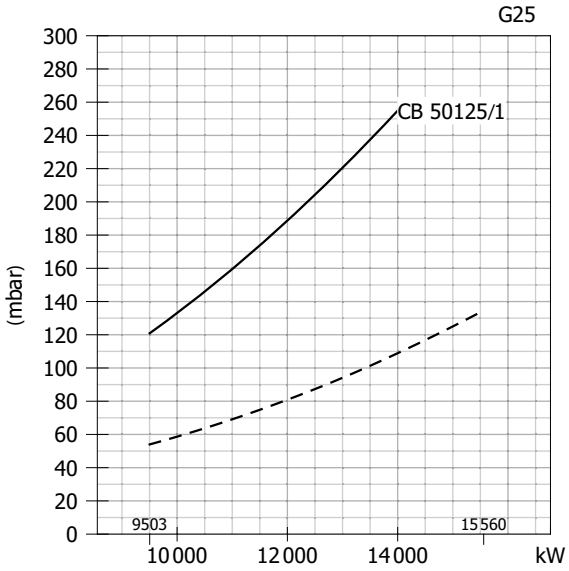




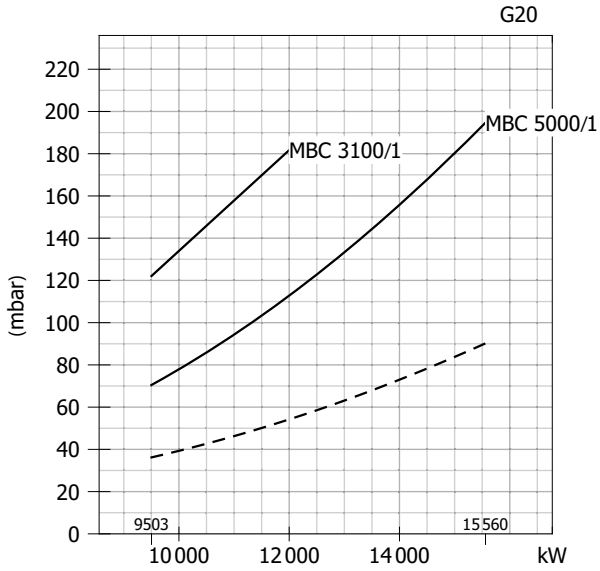
	I	D	F	GB	E	NL
	Perdite di pressione	**Druckverlust**	**Pertes de pression**	**Pressure loss**	**Pérdida de presión**	**Drukafname**
———	Testa di combustione + farfalla gas + rampa gas	Flammkopf + Gasdrossel + Gasstrecke	Tête de combustion + vanne papillon gaz + rampe gaz	Combustion head + gas butterfly valve + gas train	Cabezal de combustión + válvula de mariposa gas + rampa de gas	Verbrandingskop + gasklep + gasstraat
- - -	Testa di combustione + farfalla gas	Flammkopf + Gasdrossel	Tête de combustion + vanne papillon gaz	Combustion head + gas butterfly valve	Cabezal de combustión + válvula de mariposa gas	Verbrandingskop + gasklep

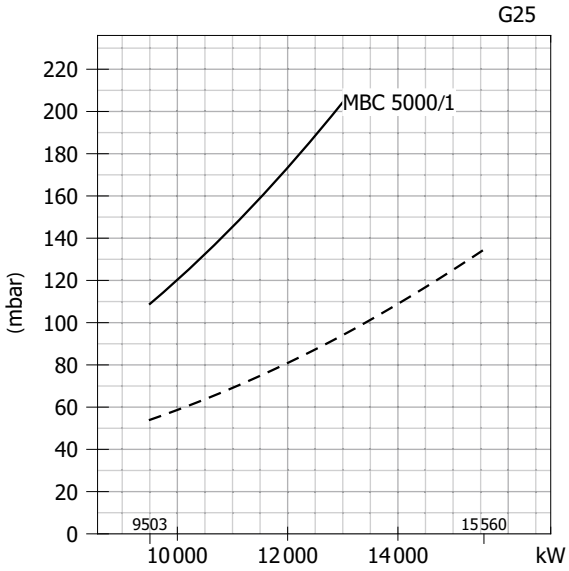
RS - RLS 1600/E - CB1



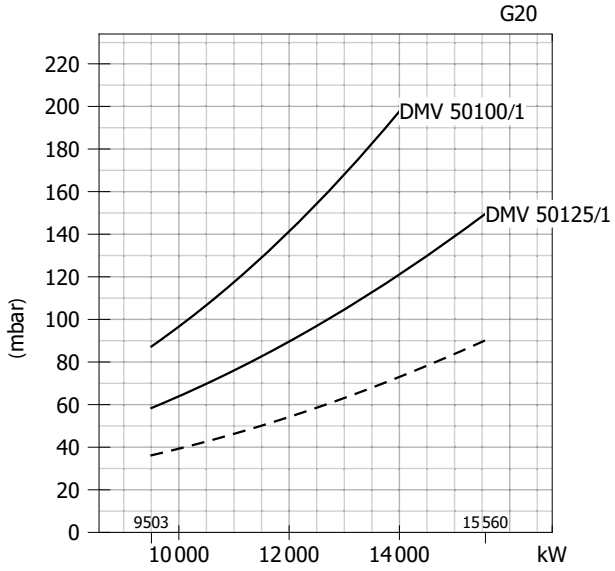


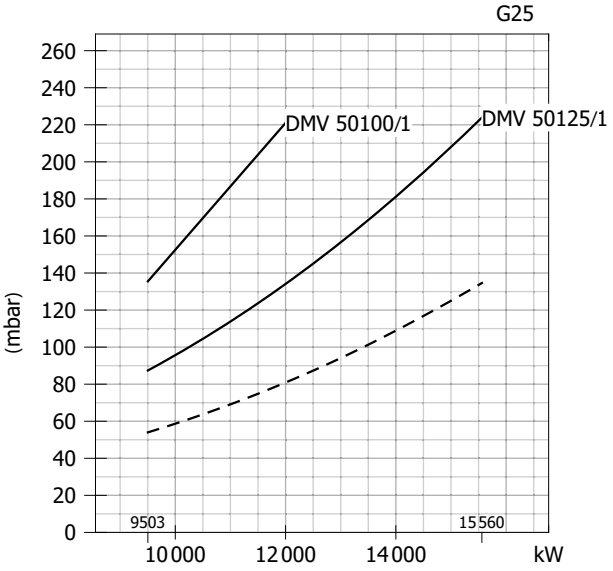
RS - RLS 1600/E - MBC



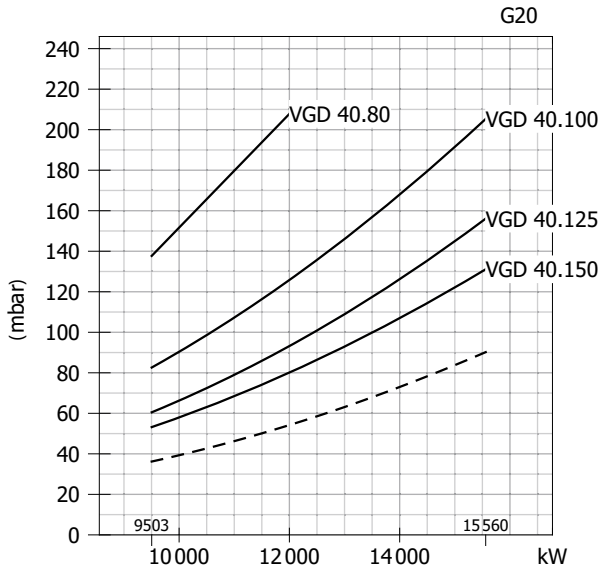


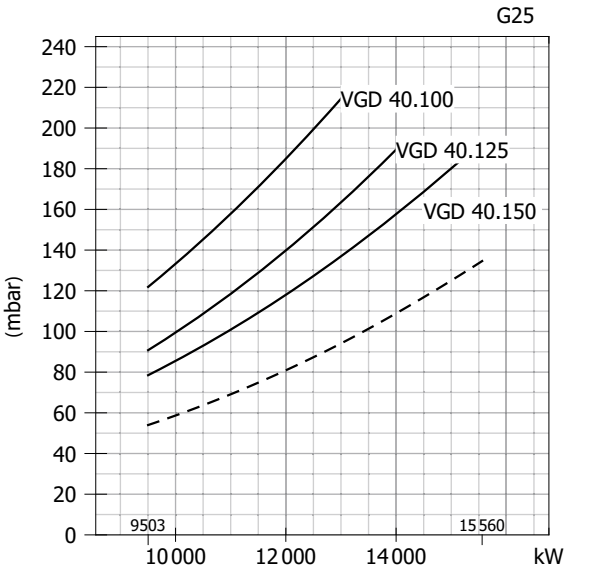
RS - RLS 1600/E - DMV





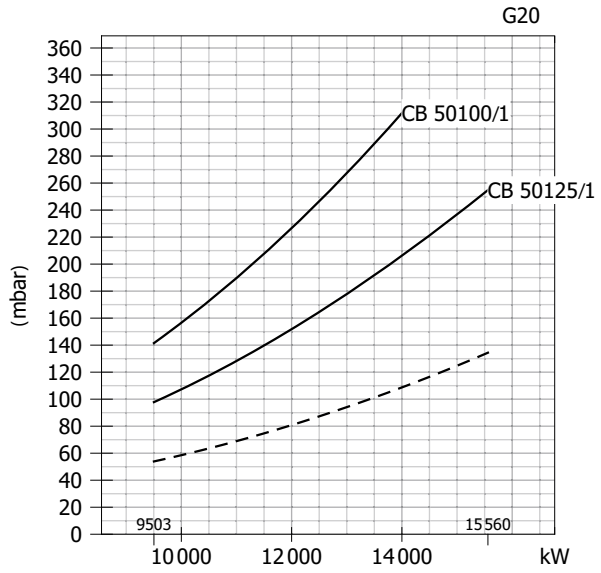
RS - RLS 1600/E - VGD

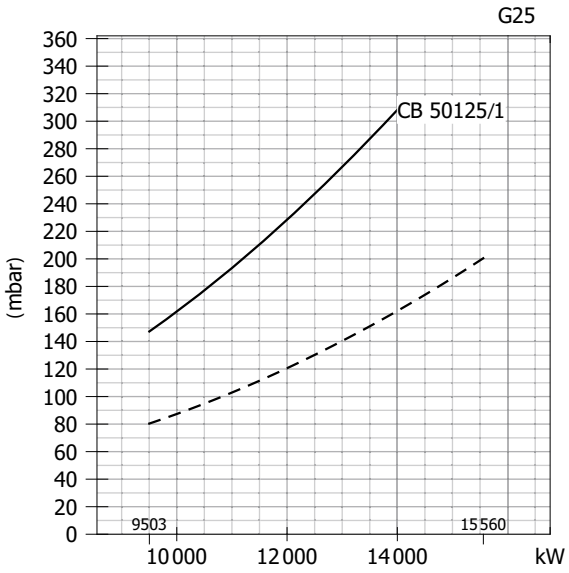




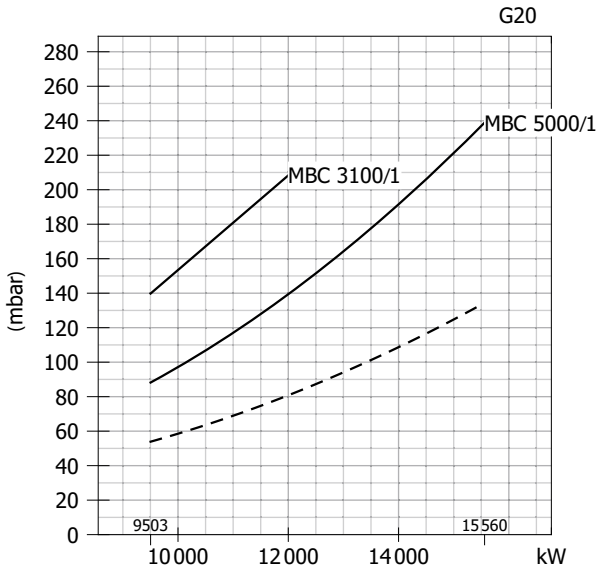
	I	D	F	GB	E	NL
	Perdite di pressione	**Druckverlust**	**Pertes de pression**	**Pressure loss**	**Pérdida de presión**	**Drukafname**
———	Testa di combustione + farfalla gas + rampa gas	Flammkopf + Gasdrossel + Gasstrecke	Tête de combustion + vanne papillon gaz + rampe gaz	Combustion head + gas butterfly valve + gas train	Cabezal de combustión + válvula de mariposa gas + rampa de gas	Verbrandingskop + gasklep + gasstraat
- - -	Testa di combustione + farfalla gas	Flammkopf + Gasdrossel	Tête de combustion + vanne papillon gaz	Combustion head + gas butterfly valve	Cabezal de combustión + válvula de mariposa gas	Verbrandingskop + gasklep

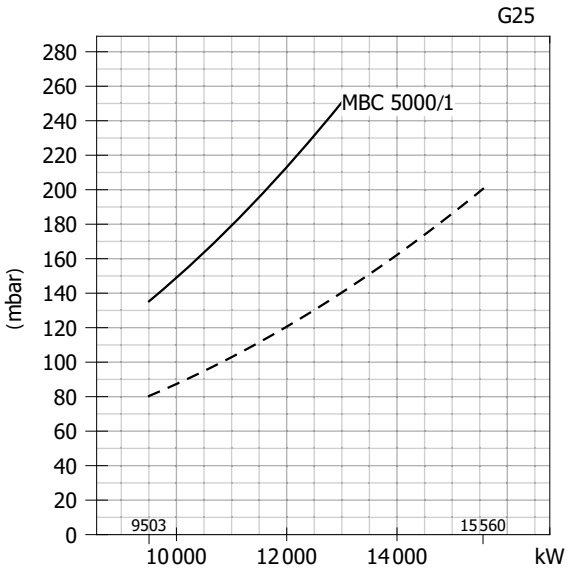
RS - RLS 1600/EV - CB1



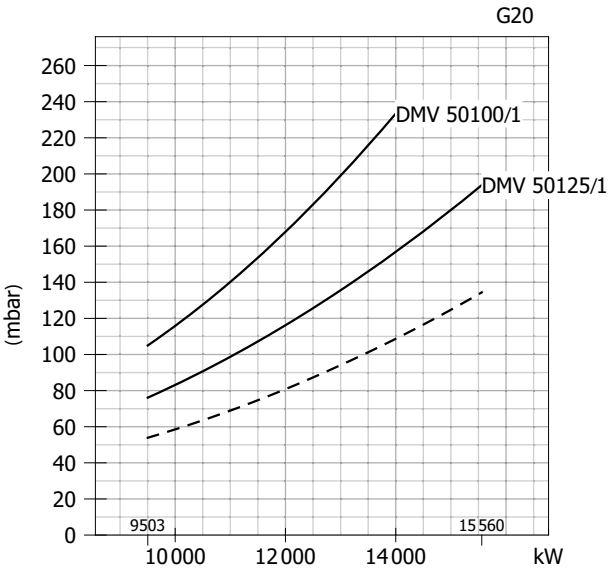


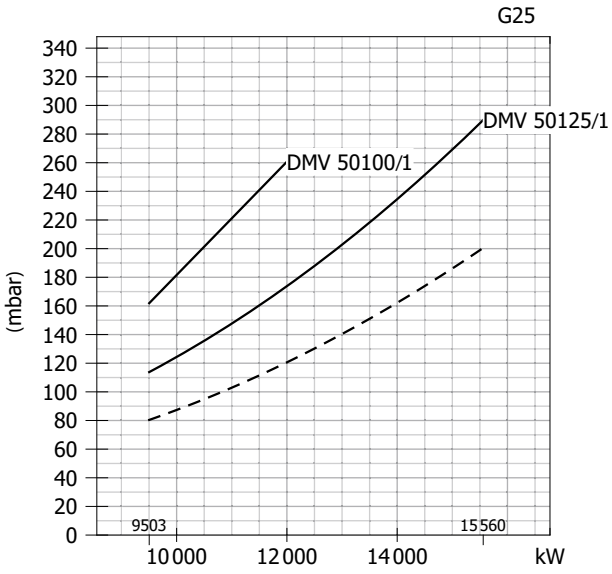
RS - RLS 1600/EV - MBC



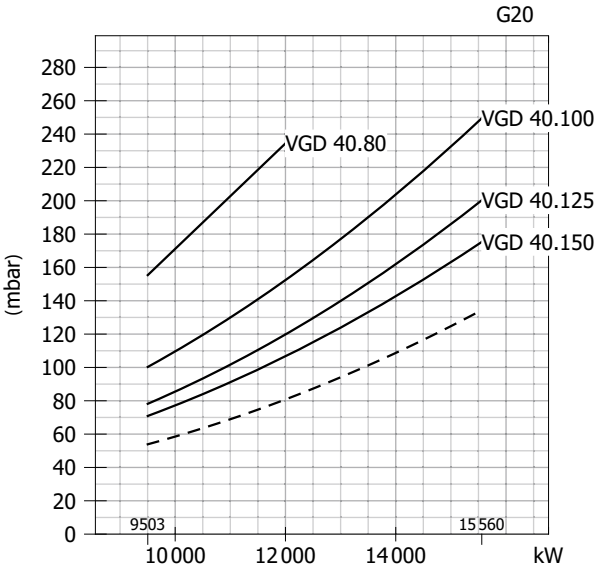


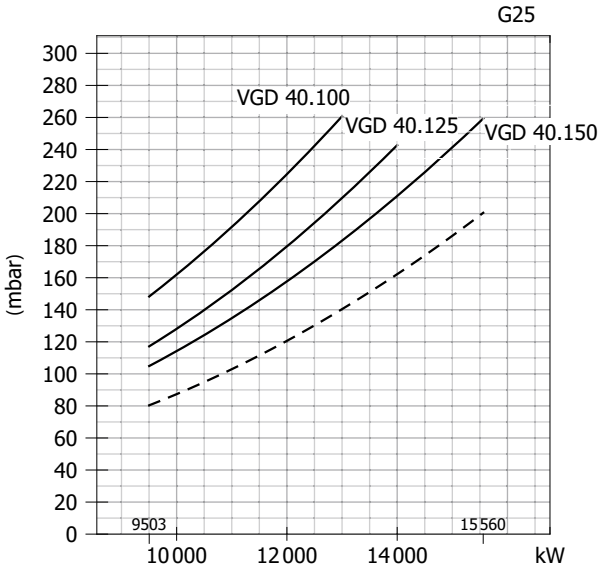
RS - RLS 1600/EV - DMV





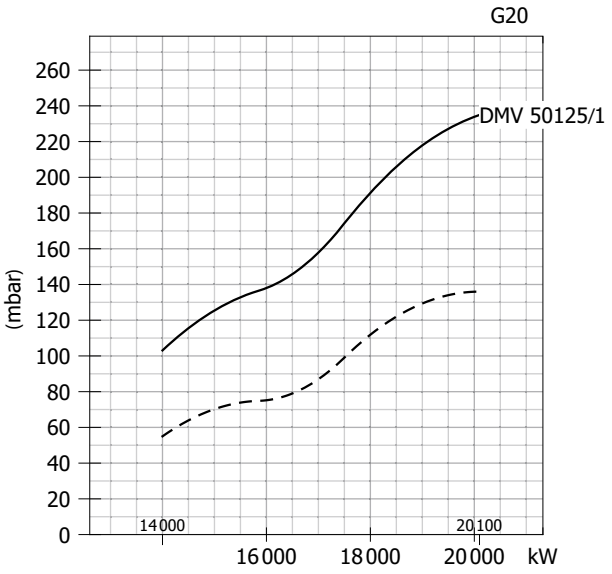
RS - RLS 1600/EV - VGD

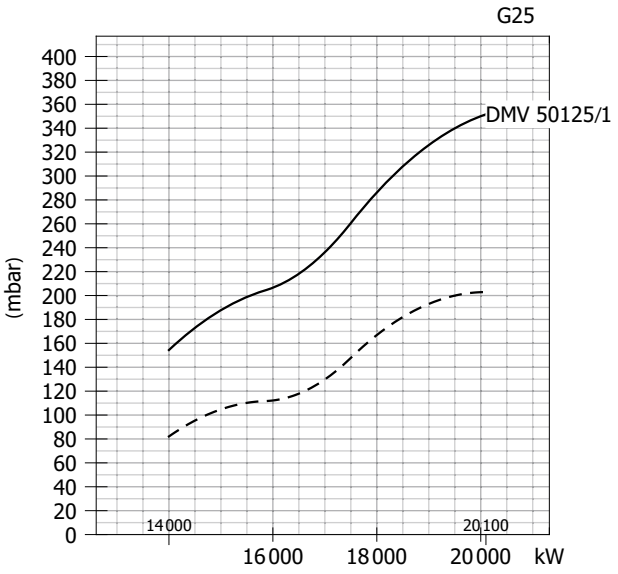




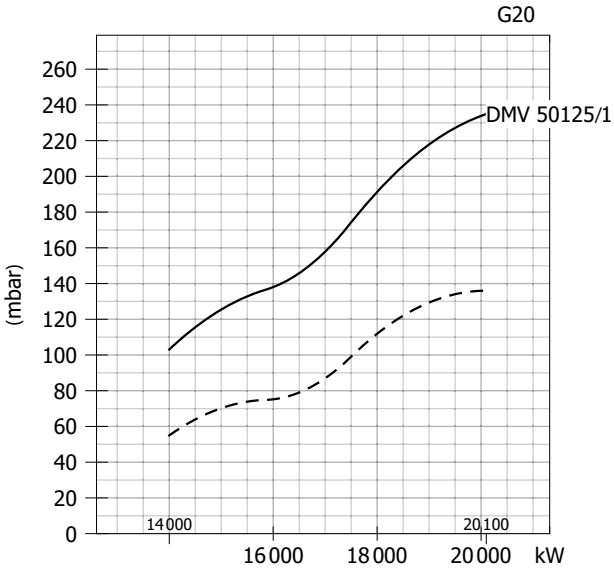
	I	D	F	GB	E	NL
	Perdite di pressione	**Druckverlust**	**Pertes de pression**	**Pressure loss**	**Pérdida de presión**	**Drukafname**
———	Testa di combustione + farfalla gas + rampa gas	Flammkopf + Gasdrossel + Gasstrecke	Tête de combustion + vanne papillon gaz + rampe gaz	Combustion head + gas butterfly valve + gas train	Cabezal de combustión + válvula de mariposa gas + rampa de gas	Verbrandingskop + gasklep + gasstraat
- - -	Testa di combustione + farfalla gas	Flammkopf + Gasdrossel	Tête de combustion + vanne papillon gaz	Combustion head + gas butterfly valve	Cabezal de combustión + válvula de mariposa gas	Verbrandingskop + gasklep

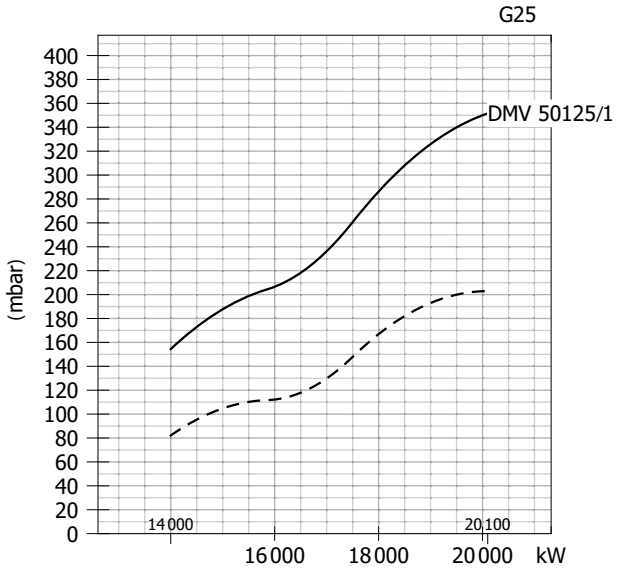
RS - RLS 2000/E - DMV





RS - RLS 2000/EV - DMV





	I	D	F	GB	E	NL
	Perdite di pressione	**Druckverlust**	**Pertes de pression**	**Pressure loss**	**Pérdida de presión**	**Drukafname**
———	Testa di combustione + farfalla gas + rampa gas	Flammkopf + Gasdrossel + Gasstrecke	Tête de combustion + vanne papillon gaz + rampe gaz	Combustion head + gas butterfly valve + gas train	Cabezal de combustión + válvula de mariposa gas + rampa de gas	Verbrandingskop + gasklep + gasstraat
- - -	Testa di combustione + farfalla gas	Flammkopf + Gasdrossel	Tête de combustion + vanne papillon gaz	Combustion head + gas butterfly valve	Cabezal de combustión + válvula de mariposa gas	Verbrandingskop + gasklep