

Solenoid valves for gas VAS, Double solenoid valves VCS

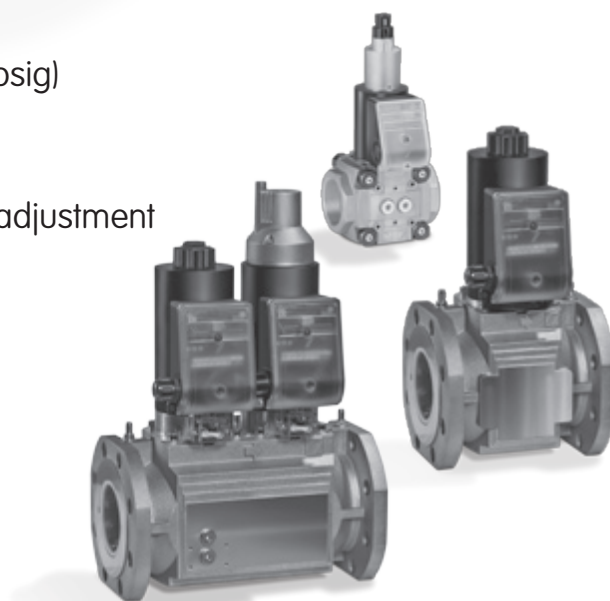
Product brochure · GB
3.1.0.2 Edition 03.08



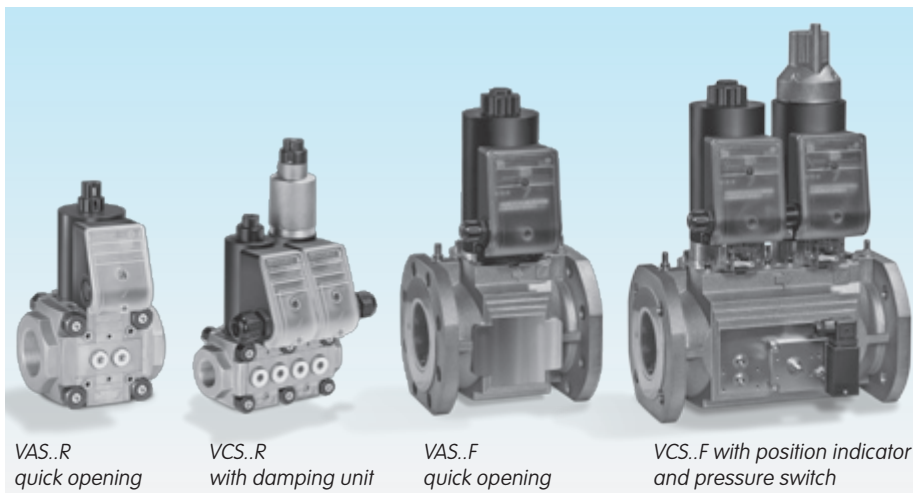
**krom
schroder**



- Safety shut-off of gaseous fuels, a further development of the solenoid valves for gas VG and VS
- Suitable for a max. inlet pressure of 500 mbar (7 psig)
- Easy installation into a system
- Compact design saves space
- No extra valve required owing to integrated flow adjustment
- Check indication by blue LED
- Position indicator with integral visual indicator
- Suitable for high-duty cycling
- Higher flow rates with the same nominal size
- EC type-tested and certified
- VAS/VCS: FM and CSA approved
- AGA approved



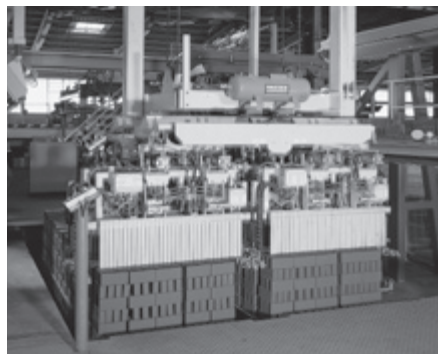
elster
Kromschroder



The modular design principle allows the individual components of the VAS, VCS Series to be easily assembled: e.g. quick opening, slow opening, with position indicator and visual indicator, slow opening with attached pressure switch.

Application

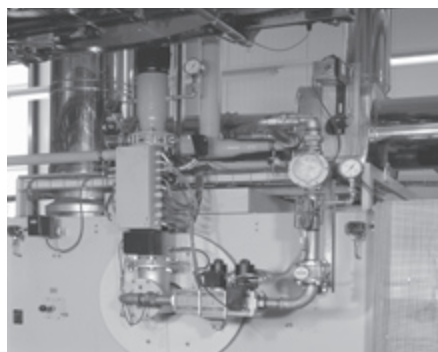
Solenoid valves for gas VAS and double solenoid valves VCS for safeguarding and controlling the air and gas supply to gas burners and gas appliances. For use in gas control and safety systems in all sectors of the iron, steel, glass and ceramics industries, also in commercial heat generation, such as the packaging, paper and foodstuffs industries.



Ceramics industry

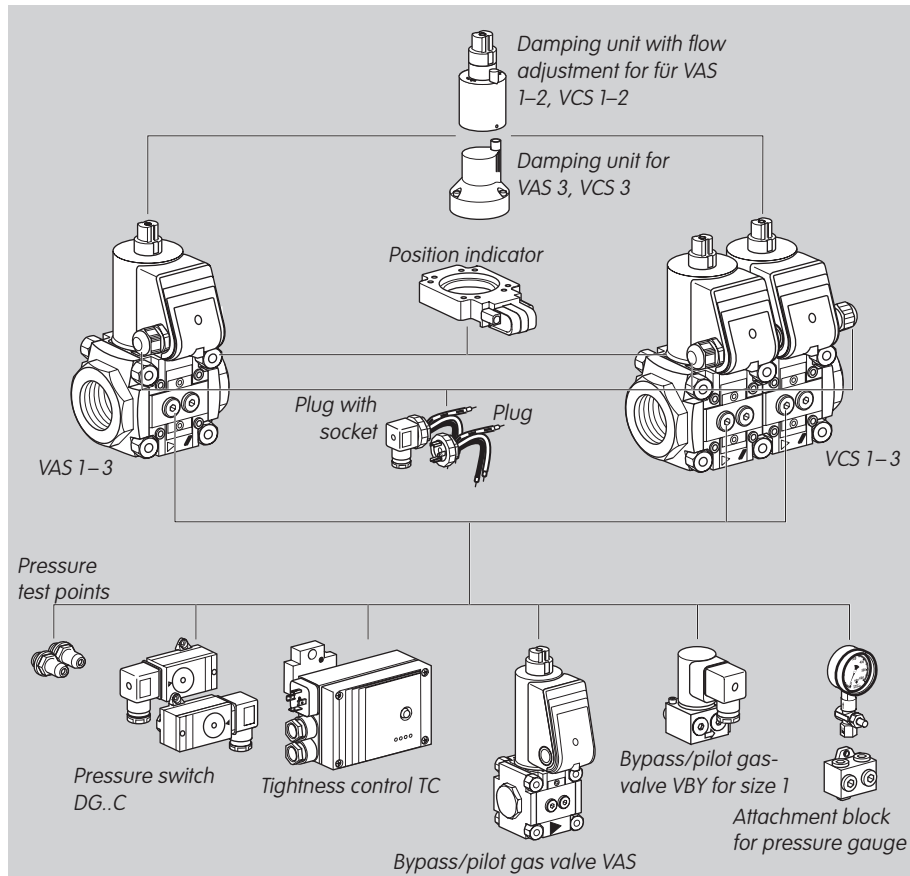


*Aluminium industry:
curing oven for
wheel rims*



*Foodstuffs industry:
baking oven*

Examples of application

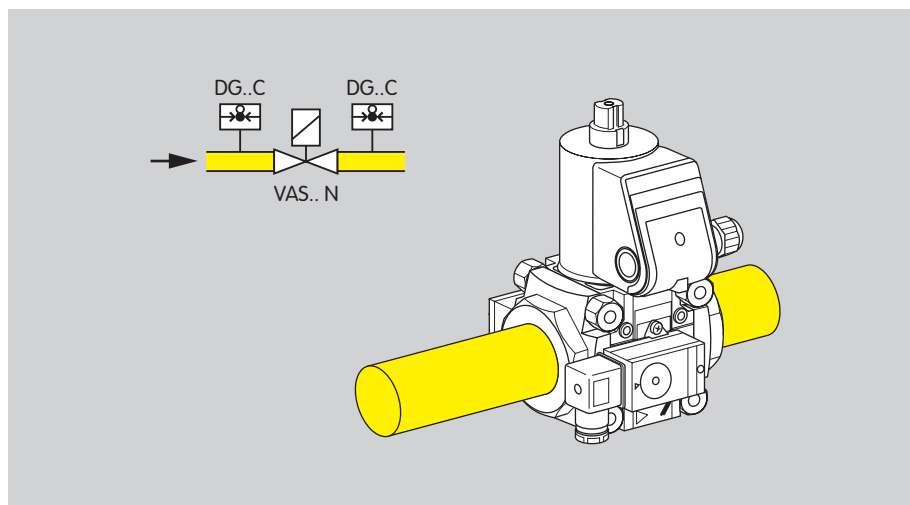


Solenoid valve for gas VAS 1-3, Double solenoid valve VCS 1-3

With threaded flange for pipe connections from DN 10 to 65.

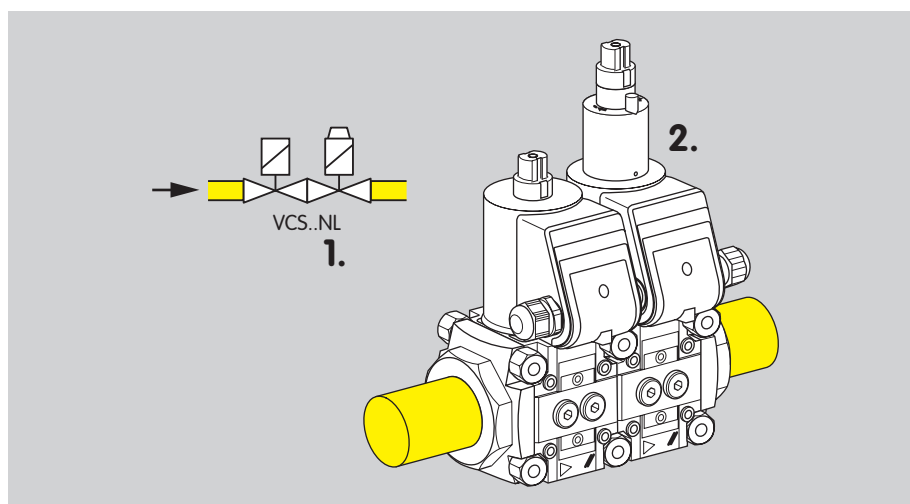
Modularly expandable with:

- Damping unit
- Position indicator
- Plug (with or without socket)
- Pressure test points
- Pressure switch DG..C for inlet and/or outlet pressure
- Tightness control TC
- Bypass/pilot gas valve
- Attachment block for the connection of a pressure gauge, for example.



Gas solenoid valve with inlet and outlet pressure switch

VAS..N, quick opening, pressure switch DG..C (DG..VT) for inlet pressure p_e and outlet pressure p_a

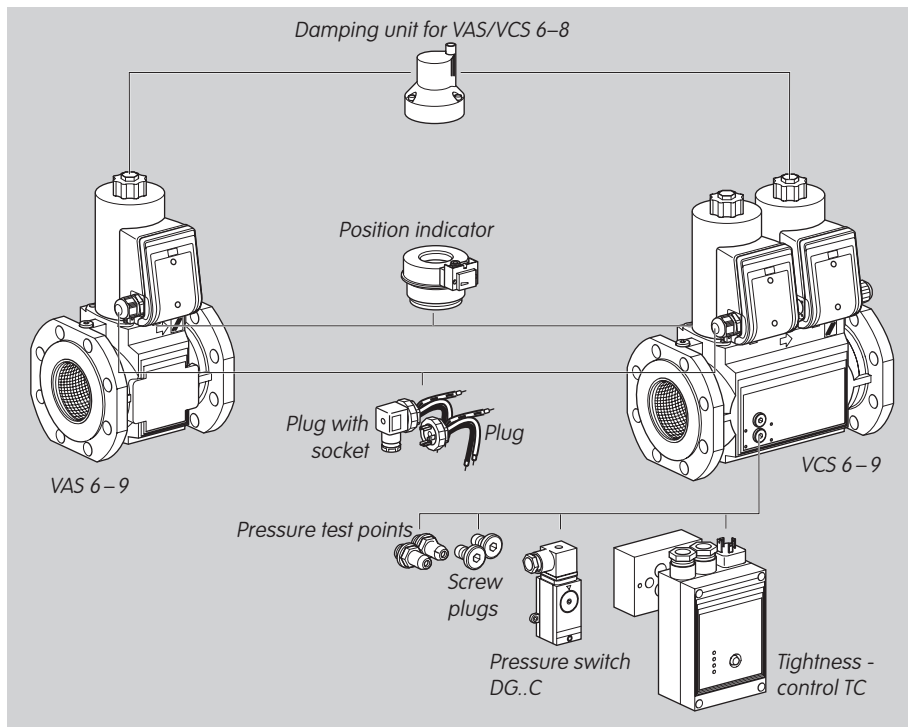


Double solenoid valve VCS with damping unit

VCS..NL,

1st valve: quick opening, quick closing, with flow adjustment,

2nd valve: slow opening, quick closing.



Solenoid valve for gas VAS 6-9, Double solenoid valve VCS 6-9

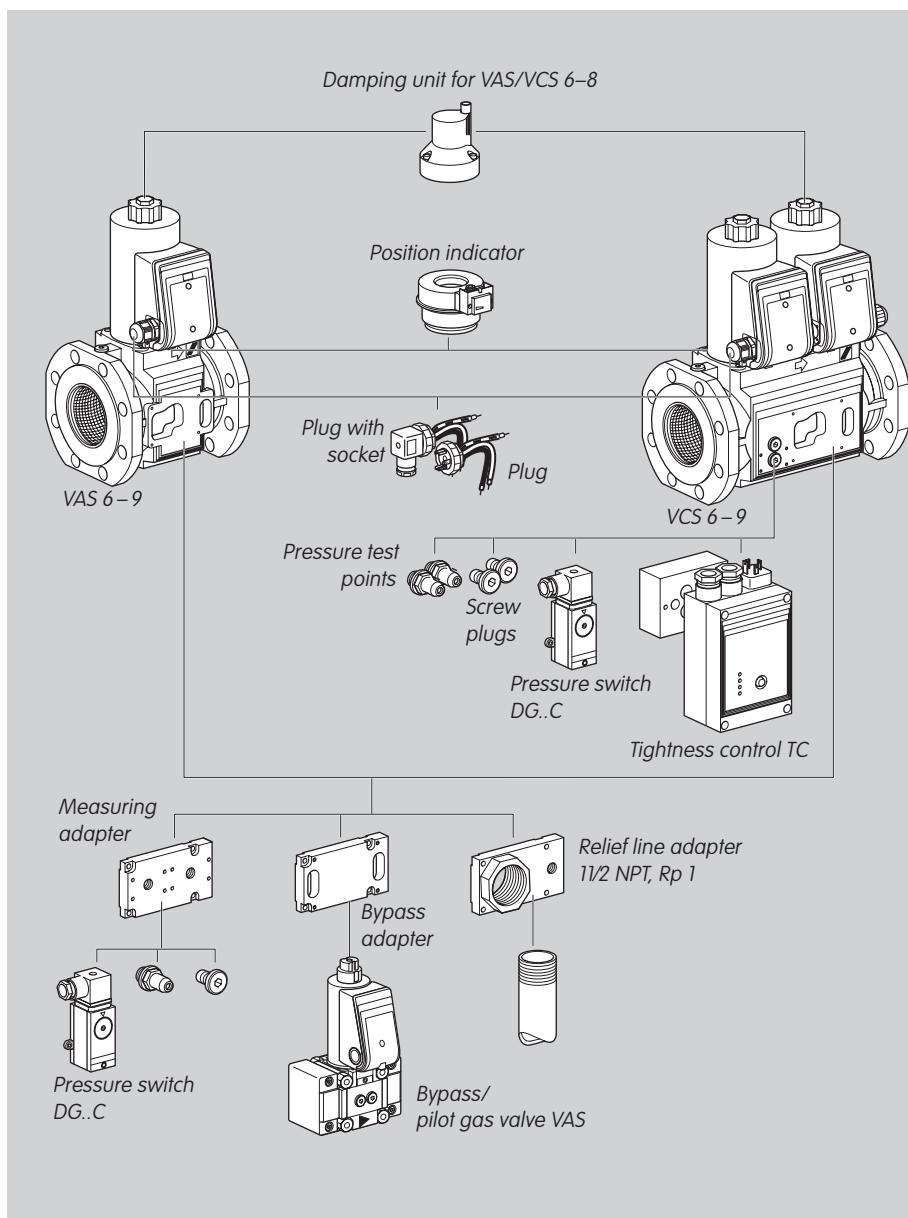
Gas solenoid valve and double solenoid valve with flanged connection (ISO or ANSI) for pipe connections from DN 65 to 125.

Modularly expandable with:

- Damping unit for VAS/VCS 6-8
- Position indicator
- Plug
- Plug with socket

VCS 6-9 with two threaded connections for:

- Screw plugs
- Pressure test points
- Pressure switch DG..C for inlet/inter-space pressure
- Tightness control TC



Solenoid valve for gas VAS 6-9, Double solenoid valve VCS 6-9 with connection for adapter plates

Gas solenoid valve and double solenoid valve with flanged connection (ISO or ANSI) for pipe connections from DN 65 to 125.

Modularly expandable with:

- Damping unit for VAS/VCS 6-8
- Position indicator
- Plug
- Plug with socket

With adapter plates, expandable with:

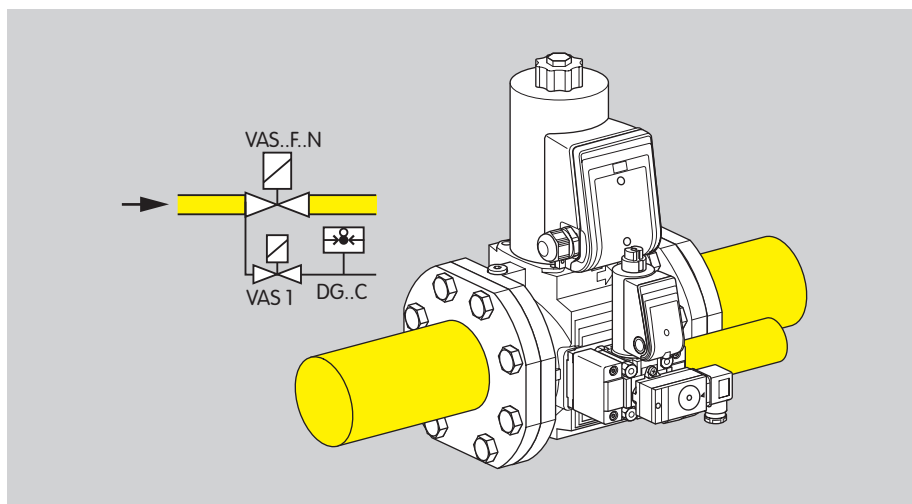
- Pressure switch DG..C
VAS 6-9: for inlet/outlet pressure
VCS 6-9: for interspace/outlet pressure
- Pressure test points
- Screw plug
- Bypass or pilot gas valve VAS

VCS 6-9

With two threaded connections for:

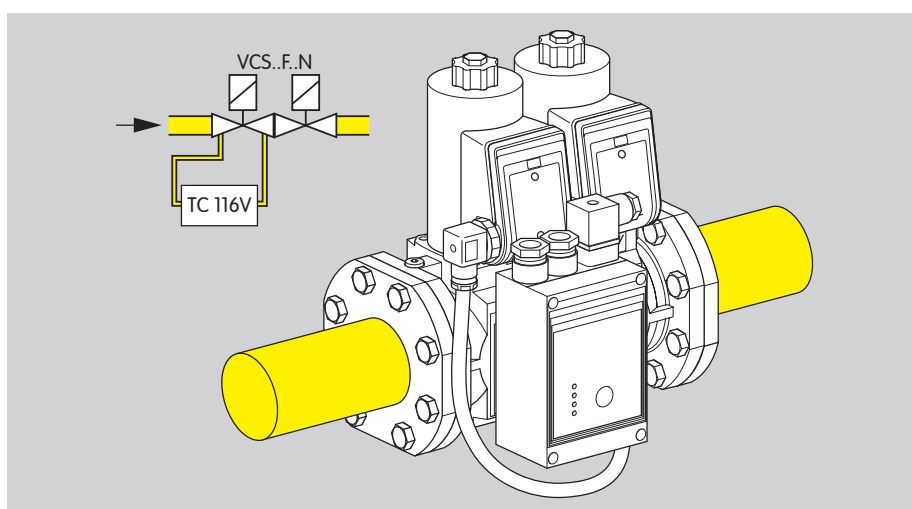
- Screw plugs
- Pressure test points
- Pressure switch DG..C for inlet/inter-space pressure
- Tightness control TC

Expandable with relief line adapter (1 1/2 NPT, Rp 1) for relief line.



Gas solenoid valve with pilot gas valve
and pressure switch

VAS..F..N: quick opening, quick closing,
VAS 1 as pilot gas valve with pressure
switch DG..C.



Double solenoid valve with tightness
control

VCS..F..N: quick opening, quick closing
valves, tightness control TC 116V.

Replacement possibilities

Solenoid valve for gas VG is to be replaced by VAS

Type					Type
VG	Solenoid valve for gas				VAS
10/15	DN 10	internal 15 mm (0.59")	Size 1	DN 10	110
15	DN 15		Size 1	DN 15	115
15/12	DN 15	internal 12 mm (0.47")	–	–	–
20	DN 20		Size 1	DN 20	120
25	DN 25		Size 1	DN 25	125
25/15	DN 25	internal 15 mm (0.59")	–	–	–
40/32	DN 40	internal 32 mm (1.26")	Size 2	DN 40	240
40	DN 40		Size 2	DN 40	240
40/33	DN 40	internal 33 mm (1.30")	–	–	–
50	DN 50		Size 3	DN 50	350
50/39	DN 50	internal 39 mm (1.54")	–	–	–
50/65	DN 50	internal 65 mm (2.59")	Size 3	DN 50	350
65	DN 65		Size 3	DN 65	365
65	DN 65		Size 6	DN 65	665
65/49	DN 65	internal 49 mm (1.93")	–	–	–
80	DN 80		Size 7	DN 80	780
100	DN 100		Size 8	DN 100	8100
T	T-product		T-product		T
R	Rp internal thread		Rp internal thread		R
N	NPT internal thread		NPT internal thread		N
F	ISO flange		ISO flange		F
A	ANSI flange		ANSI flange		A
02	p _{e max.} :	200 mbar (2 psig)	p _{e max.} : 500 mbar (7 psig)		●
03		360 mbar (5 psig)	500 mbar (7 psig)		●
10		1000 mbar (14.5 psig)	–		–
18		1800 mbar (26.1 psig)	–		–
N	Quick opening		Quick opening		/N
L	Slow opening		Slow opening		/L
K	Mains voltage: 24 V DC		Mains voltage: 24 V DC		K
Q	120 V AC		120 V AC		Q
T	220/240 V AC		230 V AC		W
3	Electrical connection via terminals		Electrical connection via terminals		3
6	Electrical connection via socket		Electrical connection via socket		○
9	Metal terminal connection box		Electrical connection via terminals		3
1	Screw plug at the inlet		Screw plug at the inlet and outlet		●
3	Screw plug at the inlet and outlet		Screw plug at the inlet and outlet		●
4	Pressure test point at the inlet		Pressure test point at the inlet and outlet*		○
6	Pressure test point at the inlet and outlet		Pressure test point at the inlet and outlet*		○
D	Flow adjustment		Flow adjustment***		●
S	Position indicator		Position indicator with visual indicator**		S
G	Position indicator for 24 V		Position indicator for 24 V with visual indicator**		G
OCS	Valve stem overtravel switch		Position indicator with visual indicator**		S
CPS	Position indicator		Position indicator with visual indicator**		S
VI	Visual indicator		Position indicator with visual indicator**		S
M	Suitable for biologically produced methane		Suitable for biologically produced methane		●
V	Viton valve disc seal		Viton valve disc seal		–
VG 25R02NT31DM	Example		Example		VAS 125R/NW

● = standard, ○ = available

* Pressure test points may be attached at the left and/or right-hand side.

** Position indicator with visual indicator can be attached at the left- or right-hand side.

*** Flow adjustment for VAS/VCL..N 1 -3, VAS/VCL 1 – 2..L.

MODULINE solenoid valves for gas VS is to be replaced by VAS

Type	Flange			Type
VS		Solenoid valve for gas	Solenoid valve for gas	VAS
115 125	3/8"	Size 115 Size 125	Size 1, DN 10	110
115 125	1/2"	Size 115 Size 125	Size 1, DN 15	115
115 125	3/4"	Size 115 Size 125	Size 1, DN 20	120
115 125	1"	Size 115 Size 125	Size 1, DN 25	125
230 240	1"	Size 232 Size 240	Size 2, DN 25	225
232 240	1 1/2"	Size 232 Size 240	Size 2, DN 40	240
350	1 1/2"	Size 350	Size 3, DN 40	340
350	2"	Size 350	Size 3, DN 50	350
ML		MODULINE + connection flanges Rp internal thread	Rp internal thread	R
TML		MODULINE + connection flanges NPT internal thread	NPT internal thread	N
02		p _{e max.} 200 mbar (2 psig)	p _{e max.} 500 mbar (7 psig)	●
03		p _{e max.} 360 mbar (3 psig)	p _{e max.} 500 mbar (7 psig)	●
N		Quick opening	Quick opening	/N
L		Slow opening	Slow opening	/L
D		Flow adjustment	Flow adjustment*	●
K		Mains voltage: 24 V DC	Mains voltage: 24 V DC	K
Q		120 V AC	120 V AC	Q
T		220/240 V AC	230 V AC	W
3		Electrical connection via terminals	Electrical connection via terminals	3
6		Electrical connection via socket	Electrical connection via socket	○
9		Metal terminal connection box	Electrical connection via terminals	3
●		Pressure test point at the inlet	Pressure test point at the inlet and outlet	○
S		Position indicator	Position indicator	S
G		Position indicator for 24 V	Position indicator for 24 V	G
M		non-ferrous metals	non-ferrous metals	●
V		Viton valve disc seal	–	–
VS 240ML02LT3				VAS 240R/LW
with Rp 1 1/2 connection flanges		Example	Example	with test points

* Flow adjustment for VAS/VCL..N 1 -3, VAS/VCL 1 – 2..L.

● = standard, ○ = available

Selection

Solenoid valve for gas VAS

Type	T	-	-0	10	15	20	25	32	40	50	65	80	100	125	/-	/-0	/10	/15	/20	/25	/32	/40	/50	/65	/80	/100	/125
VAS 1	○	●	●	●	●	●	●								●	●	●	●	●	●							
VAS 2	○	●					●	●	●	●					●				●	●	●	●	●				
VAS 3	○	●							●	●	●				●							●	●	●			
VAS 6	○										●												●				
VAS 7	○											●													●		
VAS 8	○												●													●	
VAS 9	○													●													●
T-Product = T																											
Inlet flange nominal size																											
No inlet flange = -																											
Blind flange = -0																											
Outlet flange nominal size																											
No outlet flange = -																											
Blind flange = /-0																											
Specification may be omitted if outlet = inlet																											

Continuation

Type	R	N	F	A	05 ⁴⁾	N	L	K	Q	W	A	S ¹⁾	G ¹⁾	R ¹⁾	L ¹⁾	3 ⁴⁾		P	M	
VAS 1	●	○			●	●	●	●	●	●		○	○	○	○	●	○	○		
VAS 2	●	○	○ ²⁾		●	●	●	●	●	●		○	○	○	○	●	○	○		
VAS 3	●	○	○ ²⁾		●	●	●	●	●	●		○	○	○	○	●	○	○		
VAS 6			●	○	●	●	●	●	●	●		○	○	○	○	●	○	○	●	●
VAS 7			●	○	●	●	●	●	●	●		○	○	○	○	●	○	○	●	●
VAS 8			●	○	●	●	●	●	●	●		○	○	○	○	●	○	○	●	●
VAS 9			●	○	●	●					●	○	○	○	○	●	○	○	●	●
Rp internal thread = R																				
NPT internal thread = N																				
ISO flange = F ²⁾																				
ANSI flange = A																				
Max. inlet pressure p _{e max.} 500 mbar = 05 ⁴⁾																				
Quick opening, quick closing = N																				
Slow opening, quick closing = L																				
Mains voltage: 24 V DC = K																				
120 V AC; 50/60 Hz = Q																				
230 V AC; 50/60 Hz = W																				
120–230 V AC; 50/60 Hz = A																				
Position indicator with visual indicator = S ¹⁾																				
Position indicator for 24 V with visual indicator = G ¹⁾																				
Viewed from the right (in the direction of flow) = R ¹⁾																				
Viewed from the left (in the direction of flow) = L ¹⁾																				
Electrical connection:																				
M20 cable gland = 3 ⁴⁾																				
Plug with socket																				
Plug without socket																				
Measuring connection at the top: 2 screw plugs at the inlet and outlet = P																				
2 pressure test points at the inlet and outlet = M																				

¹⁾ VAS 1–3: Position indicator and bypass-/pilot gas valve cannot be fitted together on one side.

²⁾ For inlet and outlet flanges of the same nominal size: VAS 240 and VAS 350 can be supplied.

⁴⁾ The specifications are only included in the type designation for VAS 6–9.

Continuation

Type	/P ⁴⁾	/M ⁴⁾	/1 ⁴⁾	/2 ⁴⁾	/3 ⁴⁾	/4 ⁴⁾	5)	5)	1)	/B 4) 5)	/Z 4) 5)	V	E	/-4)	P ⁴⁾	M ⁴⁾	1 ⁴⁾	2 ⁴⁾	3 ⁴⁾	4 ⁴⁾	-4)
VAS 1	○	○	○	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○
VAS 2	○	○	○	○	○	○				○	○			○	○	○	○	○	○	○	○
VAS 3	○	○	○	○	○	○				○	○			○	○	○	○	○	○	○	○
VAS 6	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○
VAS 7	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○
VAS 8	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○
VAS 9	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○

Accessories, right, inlet:

Screw plugs

Pressure test point for inlet pressure p_e

Gas pressure switch: (see accessories)

= /P⁴⁾
= /M⁴⁾
= /1⁴⁾
DG..VC 17 = /2⁴⁾
DG..VC 40 = /3⁴⁾
DG..VC 110 = /4⁴⁾
DG..VC 300

Bypass valve VBY, fitted

Pilot gas valve VBY, fitted

Main valve attachment side

Bypass valve VAS 1, fitted

Pilot gas valve VAS 1, fitted

Prepared for breather line 1½ NPT

Prepared for breather line Rp 1

None accessories

= 5)
= 5)
= 4)
= /B 4) 5)
= /Z 4) 5)
= V
= E
= /-4)

Accessories, right, outlet:

Screw plug

Pressure test point for outlet pressure p_a

Gas pressure switch: (see accessories)

= P⁴⁾
= M⁴⁾
= 1⁴⁾
DG..VC 17 = 2⁴⁾
DG..VC 40 = 3⁴⁾
DG..VC 110 = 4⁴⁾
DG..VC 300

None accessories

= -4)

Accessories on left-hand side equivalent to those on right-hand side³⁾

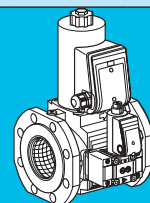
³⁾ The "accessories on the left-hand side" have the same type code as the "accessories on the right-hand side" (see order example: 1 screw plug each at the inlet and outlet on the left-hand side = /PP).

⁴⁾ The specifications are only included in the type designation for VAS 6–9.

⁵⁾ VAS 1–3: Position indicator and bypass-/pilot gas valve cannot be fitted together on one side. The "accessories on the left-hand side" have the same type code as the "accessories on the right-hand side" (see order example: 1 screw plug each at the inlet and outlet on the left-hand side = /PP).

● = standard, ○ = available

Order example VAS 665F05NW3P/B-/PP



Double solenoid valve VCS

Type	T	-	-0	10	15	20	25	32	40	50	65	80	100	125	/-	/-0	/10	/15	/20	/25	/32	/40	/50	/65	/80	/100	/125		
VCS 1	○	●	●	●	●	●	●								●	●	●	●	●	●									
VCS 2	○	●					●	●	●	●					●					●	●	●	●						
VCS 3	○	●							●	●	●				●							●	●	●					
VCS 6	○										●													●					
VCS 7	○											●													●				
VCS 8	○												●													●			
VCS 9	○													●													●		
T-Product = T																													
Inlet flange nominal size																													
No inlet flange = -																													
Blind flange = -0																													
Outlet flange nominal size																													
No outlet flange = -																													
Blind flange = /-0																													
Specification may be omitted if outlet = inlet																													

Continuation

Type	R	N	F	A	05 ³⁾	N	L	N	L	K	Q	W	A	S ¹⁾	G ¹⁾	R ¹⁾	L ¹⁾	3 ³⁾	P	M
VCS 1	●	○			●	●	●	●	●	●	●	●		○	○	○	○	●	○	○
VCS 2	●	○	○ ²⁾		●	●	●	●	●	●	●	●		○	○	○	○	●	○	○
VCS 3	●	○	○ ²⁾		●	●	●	●	●	●	●	●		○	○	○	○	●	○	○
VCS 6			●	○	●	●		●	●	●	●	●		○	○	○	○	●	○	○
VCS 7			●	○	●	●		●	●	●	●	●		○	○	○	○	●	○	○
VCS 8			●	○	●	●		●	●	●	●	●		○	○	○	○	●	○	○
VCS 9			●	○	●	●		●					●	○	○	○	○	●	○	○
Rp internal thread = R NPT internal thread = N ISO flange = F ²⁾ ANSI flange = A																				
Max. inlet pressure p _{e max.} 500 mbar = 05 ³⁾																				
1st valve quick opening, quick closing = N 1st valve slow opening, quick closing = L																				
2nd valve quick opening, quick closing = N 2nd valve slow opening, quick closing = L																				
Mains voltage: 24 V DC = K 120 V AC; 50/60 Hz = Q 230 V AC; 50/60 Hz = W 120–230 V AC; 50/60 Hz = A																				
Position indicator with visual indicator = S ¹⁾ Position indicator for 24 V with visual indicator = G ¹⁾																				
Viewed from the right (in the direction of flow) = R ¹⁾ Viewed from the left (in the direction of flow) = L ¹⁾																				
Electrical connection: M20 cable gland = 3 ³⁾ Plug with socket Plug without socket																				
Measuring connections at the top of the inlet/outlet flange: Screw plugs = P Pressure test points = M																				

¹⁾ VCS 1–3: Position indicator and bypass-/pilot gas valve cannot be fitted together on one side.²⁾ For inlet and outlet flanges of the same nominal size: VAS 240 and VAS 350.³⁾ The specifications are only included in the type designation for VAS 6–9.

Continuation

Type	/P ¹⁾	/M ¹⁾	/1 ¹⁾	/2 ¹⁾	/3 ¹⁾	/4 ¹⁾	/5 ¹⁾	/R ⁵⁾	/H ¹⁾	/B ^{1) 5)}	/Z ^{1) 5)}	/- ¹⁾	P ¹⁾	M ¹⁾	1 ¹⁾	2 ¹⁾	3 ¹⁾	4 ¹⁾	- ¹⁾							
VCS 1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○							
VCS 2	○	○	○	○	○	○			○	○	○	○	○	○	○	○	○	○	○							
VCS 3	○	○	○	○	○	○			○	○	○	○	○	○	○	○	○	○	○							
VCS 6	○	○	○	○	○	○			○			○	○	○	○	○	○	○	○							
VCS 7	○	○	○	○	○	○			○			○	○	○	○	○	○	○	○							
VCS 8	○	○	○	○	○	○			○			○	○	○	○	○	○	○	○							
VCS 9	○	○	○	○	○	○			○			○	○	○	○	○	○	○	○							
Accessories, right, inlet:																										
Screw plugs				= /P ¹⁾																						
Pressure test point p _e				= /M ¹⁾																						
Gas pressure switch (see accessories):				DG 17VC = /1 ¹⁾																						
				DG 40VC = /2 ¹⁾																						
				DG 110VC = /3 ¹⁾																						
				DG 300VC = /4 ¹⁾																						
Bypass valve VBY, fitted				= /I ⁵⁾																						
Pilot gas valve VBY, fitted				= /R ⁵⁾																						
Main valve attachment side				= /H ¹⁾																						
Bypass valve VAS 1, fitted				= /B ^{1) 5)}																						
Pilot gas valve VAS 1, fitted				= /Z ^{1) 5)}																						
None accessories				= /- ¹⁾																						
Accessories, right, interspace 1:																										
Screw plug				= P ¹⁾																						
Pressure test point p _a				= M ¹⁾																						
Gas pressure switch:				DG 17VC = 1 ¹⁾																						
				DG 40VC = 2 ¹⁾																						
				DG 110VC = 3 ¹⁾																						
				DG 300VC = 4 ¹⁾																						
None accessories				= - ¹⁾																						

¹⁾ The specifications are only included in the type designation for VAS 6–9.

⁵⁾ VCS 1–3: Position indicator and bypass-/pilot gas valve cannot be fitted together on one side.

Continuation

Type	P ¹⁾	M ¹⁾	1 ¹⁾	2 ¹⁾	3 ¹⁾	4 ¹⁾	5 ¹⁾	5 ¹⁾	1 ¹⁾	B ¹⁾⁵⁾	Z ¹⁾⁵⁾	V	E	- ¹⁾	P ¹⁾	M ¹⁾	1 ¹⁾	2 ¹⁾	3 ¹⁾	4 ¹⁾	- ¹⁾
VCS 1	○	○	○	○	○	○	○	○	○	○	○			○	○	○	○	○	○	○	○
VCS 2	○	○	○	○	○	○				○	○			○	○	○	○	○	○	○	○
VCS 3	○	○	○	○	○	○				○	○			○	○	○	○	○	○	○	○
VCS 6	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○
VCS 7	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○
VCS 8	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○
VCS 9	○	○	○	○	○	○				○	○	○	○	○	○	○	○	○	○	○	○
Accessories, right, interspace 2:																					
Screw plugs = P ¹⁾																					
Pressure test point for inlet pressure p _e = M ¹⁾																					
Gas pressure switch: DG 17VC = 1 ¹⁾																					
DG 40VC = 2 ¹⁾																					
DG 110VC = 3 ¹⁾																					
DG 300VC = 4 ¹⁾																					
Bypass valve VBY, fitted = 5 ¹⁾																					
Pilot gas valve VBY, fitted = 5 ¹⁾																					
Main valve attachment side = 1 ¹⁾																					
Bypass valve VAS 1, fitted = B ¹⁾⁵⁾																					
Pilot gas valve VAS 1, fitted = Z ¹⁾⁵⁾																					
Prepared for breather line 1½ NPT = V																					
Prepared for breather line Rp 1 = E																					
None accessories = - ¹⁾																					
Accessories, right, outlet:																					
Screw plug = P ¹⁾																					
Pressure test point p _a = M ¹⁾																					
Gas pressure switch: DG..VC 17 = 1 ¹⁾																					
DG..VC 40 = 2 ¹⁾																					
DG..VC 110 = 3 ¹⁾																					
DG..VC 300 = 4 ¹⁾																					
None accessories = - ¹⁾																					
Accessories on left-hand side equivalent to those on right-hand side ⁴⁾																					

¹⁾ The specifications are only included in the type designation for VAS 6 – 9.

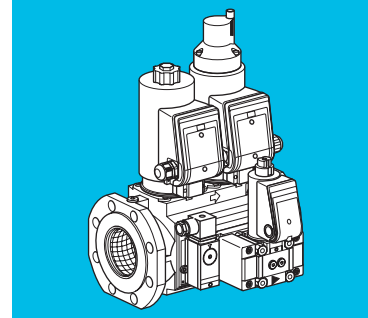
⁴⁾ The “accessories on the left-hand side” have the same type code as the “accessories on the right-hand side”
(see order example: 1 screw plug each at the inlet, interspace 1, interspace 2 and outlet on the left-hand side = /PPPP).

⁵⁾ VCS 1–3: Position indicator and bypass-/pilot gas valve cannot be fitted together on one side.

● = standard, ○ = available

Order example

VCS 665F05NLWSR3P/1PB-/PPPP



Technical data

Types of gas: Natural gas, LPG (gaseous), biologically produced methane (max. 0.1 %-by-vol. H₂S) or air; other gases on request.

The gas must be dry in all temperature conditions and must not condense.

Max. inlet pressure $p_{e \max}$: 500 mbar (7 psig).

FM approved, non operational pressure: 700 mbar (10 psig).

CSA approved: 350 mbar (5 psig).

Flow adjustment limits the maximum flow volume between 20 and 100%. On VAS 1–3, the setting can be monitored on an indicator.

Adjustment of the start gas rate: 0 to 70%.

Opening times:

VAS../N quick opening: ≤ 1 s;

VAS../L slow opening: up to 30 s.

Closing time:

VAS../N, VAS../L quick closing: < 1 s.

Ambient temperature: -20 to +60°C (-4 to +140°F), no condensation permitted.

Storage temperature: -20 to +40 °C (-4 to +104 °F), no condensation permitted.

Safety valve:

Class A Group 2 pursuant to EN 13611 and EN 161,

Factory Mutual Research Class: 7410 and 7411,

ANSI Z21.21 and CSA 6.5.

Mains voltage:

230 V AC, +10/-15%, 50/60 Hz;

120 V AC, +10/-15%, 50/60 Hz;

24 V DC, $\pm 20\%$.

VAS/VCS 9:

120–230 V~, +10/-15 %, 50/60 Hz.

Cable gland: M20 x 1.5

Electrical connection: max. 2.5 mm² (AWG 12) or plug with socket to EN 175301-803.

Power consumption:

Typ	24 V= [W]	120 V~ [W]	230 V~ [W]
VAS 1	29	30	30
VAS 2	46	54	53
VAS 3	58	63	63
VAS 6	70	63	63
VAS 7	75	90	83
VAS 8	99	117	113
VAS 9	–	200 (15*)	200 (15*)
VCS 1	58	60	60
VCS 2	92	108	106
VCS 3	116	126	126
VCS 6	140	126	126
VCS 7	150	180	166
VCS 8	198	234	226
VCS 9	–	400 (30*)	400 (30*)

* After opening.

Enclosure: IP 65.

Duty cycle: 100%.

Power factor of the solenoid coil: $\cos \varphi = 1$.

Switching frequency:

VAS../N: Arbitrary,

VAS../L: There must be a period of 20 seconds between switching off and on again so that the damping is fully effective.

Valve housing: Aluminium,

Valve seal: NBR.

Connection flanges:

VAS/VCS 1-3 with internal thread:

Rp pursuant to ISO 7-1, NPT pursuant to ANSI/ASME

VAS/VCS 6-9 with ISO flange pursuant to ISO 7005, with ANSI flange pursuant to ASA.

Position indicator contact rating:

Type	Voltage	min. current (resistive load)	max. current (resistive load)
VAS../S, VCS../S	12–250 V~, 50/60 Hz	100 mA	3 A
VAS../G, VCS../G	12–250 V~, 50/60 Hz	2 mA	0.1 A

Switching frequency: 5× per minute.

switching current [A]	switching cycles	
	$\cos \varphi = 1$	$\cos \varphi = 0,6$
0.1	500,000	500,000
0.5	300,000	250,000
1	200,000	100,000
3	100,000	–

VAS/VCS 9

Switching frequency: 1× per minute.

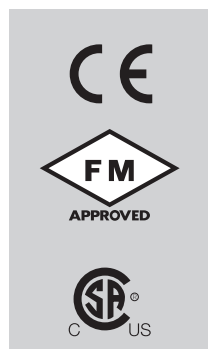
Max. temperature of solenoid coil:

+20°C (+68°F) above ambient temperature.

Current consumption at 20°C (68°F):

Pick-up current: 1.8 A

Holding current: 0.3 A.



Certification

EC type-tested and certified
pursuant to

- Gas Appliances Directive (90/396/EEC) in conjunction with EN 161, EN 13611

Meets the requirements of the

- Low Voltage Directive (2006/95/EC) in conjunction with the relevant standards,
- EMC Directive (2004/108/EC) in conjunction with EN 55014-1.

FM approved

Factory Mutual Research Class: 7410 and 7411 Safety overpressure slam shut valves.

Designed for applications pursuant to NFPA 85 and NFPA 86.

CSA approved

Canadian Standard Association – ANSI Z21.21 and CSA 6.5

UL approval

In preparation.

AGA approved

Australian Gas Association

Maintenance cycles

At least once per annum, at least twice per annum for biologically produced methane.

If the flow rate drops, clean the strainer.

Detailed information on this product

www.docuthek.com

Contact

www.kromschroeder.com → Sales

Elster GmbH
Postfach 2809 · 49018 Osnabrück
Strotheweg 1 · 49504 Lottje (Büren)
Germany

T +49 541 1214-0
F +49 541 1214-370
info@kromschroeder.com
www.kromschroeder.com
www.elster.com

Kromschroder, a product
brand of the Elster Group

**krom
schroder**

We reserve the right to make technical modifications
in the interests of progress.

Copyright © 2007 Elster Group
All rights reserved.