CONTROL VALVES

- Electric and pneumatic control valves (heat control)
- Electric and pneumatic control valves (refrigeration)
- Shut-off valves
- Three way control valves
- Flow-control silencers
- RTK – Heavy duty control valves
- Electric control valves with fail closed unit
- Steam converting valves
- Multi nozzle lancer desuperheaters
- Feed-water control valves with re-circulation connection
- Continuous blow down valves
- Bottom blow down valves
- Valves for discharge / re-circulation control

MV 5211

PV 6221

Electric series

Pneumatic series

With electric actuators REact 15E ST 5112	**With pneumatic actuators** ST 6115 ST 6135	**With Bellows seal**
MV 5211	PV 6211	–
MV 5214	PV 6214	yes
MV 5221	PV 6221	–
MV 5224	PV 6224	yes
MV 5231	PV 6231	–
MV 5234	PV 6234	yes

Technical data

	DIN		ANSI
Nominal diameter	DN 15 … 100		NPS ½" … 4"
Nominal pressure	PN 16 … 160		Class 150 … 900
Body materials	EN-GJL-250	(PN 16)	SA216 WCB
	EN-GJS-400-18-LT	(PN 16; 25)	SA351 CF8M
	GP240GH	(PN 16 … 160)	SA217 WC9
	G17CrMo5-5	(PN 63 … 160)	
	GX5CrNiMo19-11-2	(PN 16 … 40)	
	Other materials available on request		
Flanges	According to DIN 2501; EN 1092-1 and EN 1092-2		ASME B16.5
	Different flanges on request		
Butt Weld ends	According to DIN 3239 – part 1 or EN 12627		
	Edge form DIN 2559-21 (Others on request)		
	End connection P235GH for body material GP-240 GH		
	End connection 13CrMo4-5 for body material G 17 CrMo 5-5		
Stem packing	Chevron rings PTFE-graphite		(max. 250 °C)
	Stuffing box pure graphite		(max. 530 °C medium dependent)
	Bellows seal with safety stuffing box		(max. 350 °C)
	Stem packing with DVGW-Approval		(max. 6 bar, 60 °C)
	Stem packing for oxygen with BAM approval		(max. 50 °C)
Trim variations	Shut-off plug 1.4122		(none)
	Parabloic plug 1.4122		(equal% / linear)
	V-port plug 1.4122, Full stellit, Ferro Titanium		(linear)
	Perforated plug 1.4122, 1.4122 hardened		(equal% / linear)
	Mixing- / Diverting plug 1.4122, 1.4408		(linear)
	Soft seat PTFE-graphite		
	Seat 1.4571, Stellit		
	Stem 1.4571		
	Others on request		
Version for refrigerants	Chevron packing rings NBR		(-60 °C to 100 °C)
	Chevron rings PTFE-graphite		(-60 °C to 250 °C)
	Seals (gaskets) suitable for refrigerants		
	Bellows seal with safety stuffing box		
	Stem heater with glycerine cup, free from non-ferrous metals		
	Bonnet studs and nuts in stainless steel		
	Epoxy coating		
	Flanges with groove		
Seat leakage	According to DIN EN 1349, Class IV		
	Class IV-S2 according to DIN EN 1349 (lapped in metal to metal)		
	Class VI according to DIN EN 1349 soft seat with PTFE / graphite (max. + 200 °C)		
	According to ANSI / FC / 70-2		
Max. press / temp.	According to DIN EN 1092 / ASME B16.34		
Approvals	ATEX (PV…)		
	TR TS (MV…, PV…, HV…)		
	DGRL (MV…, PV…)		
	DVGW (on request)		

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html

MV 5174

Electric series

With electric actuator REact 15E	With Bellows seal
MV 5174	yes

Motorized control valves for mixing and diverting (up to DN 65) used for thermal oil and other process liquids

- Three-way design with shortened B-flange
- Long life chambered bellow seals with twist lock
- Actuator can be turned as desired for simple operating and cabling

Technical data

Nominal diameter	DN 50 und 65	
Nominal pressure	PN 16	
Body material	EN-GJS-400-18-LT	
Flanges	According to DIN EN 1092-2 Different flanges on request	
Stem packing	Metal bellow seal with safety stuffing box	(max. 350 °C)
Trim variations	Mixing plug 1.4122 Bellow + Stem 1.4571 Seat 1.4571 Others on request	(linear) (AISI 316 Ti) (AISI A316 Ti)
Seat leakage	According to DIN EN 1349, Class IV	
Approvals	DGRL	

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html

MV 5274

PV 6274

Electric series

Pneumatic series

With electric actuators REact 15E ST 5112	**With pneumatic actuators** ST 6115 ST 6135	**With Bellows seal**
MV 5271	PV 6271	–
MV 5274	PV 6274	yes

Technical data

Nominal diameter	DN 20 … 100	
Nominal pressure	PN 16, 25	
Body materials	EN-GJL-250	(max. PN 16)
	EN-GJS-400-18-LT	(max. PN 25)
Flanges	Connection according to DIN 2501 Facing DIN 2526 Form C Connection according to DIN EN 1092 Different flanges on request	
Stem packing	Chevron rings PTFE-graphite	(max. 250 °C)
	Bellow seal with safety stuffing box	(max. 350 °C)
Trim variations	Mixing plug 1.4122 / 1.4408	(linear)
	Stem + Seat 1.4571 Others on request	
Seat leakage	According to DIN EN 1349, Class IV Class IV-S2 according to DIN EN 1349 (lapped in metal to metal)	
Approvals	ATEX (PV…) TR TS (MV…, PV…) DGRL (MV…, PV…)	

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html

MV 5311

PV 6321

PV 6314

Electric series

Pneumatic series

With electric actuators ST 5113 ST 5114	With pneumatic actuators ST 6160	With Bellows seal	With Bellows seal PN100
MV 5311	PV 6311	–	–
MV 5314	PV 6314	yes	yes
MV 5321	PV 6321	–	–
MV 5324	PV 6324	yes	–
MV 5331	PV 6331	–	–
MV 5334	PV 6334	yes	–

Technical data

	DIN		ANSI
Nominal diameter	DN 15 … 150		NPS ½" … 6"
Nominal pressure	PN 16 … 160		Class 150 … 900
Body materials	EN-GJL-250	(PN 16)	SA216 WCB
	EN-GJS-400-18-LT	(PN 16; 25)	SA351 CF8M
	GP240GH	(PN 16 … 160)	SA217 WC9
	G17CrMo5-5	(PN 63 … 160)	
	GX5CrNiMo19-11-2	(PN 16 … 40)	
	Other materials available on request		
Flanges	According to DIN 2501; EN 1092-1 and EN 1092-2		ASME B16.5
	Different flanges on request		
Butt weld ends	According to DIN 3239 – part 1 or EN 12627		
	Edge form DIN 2559-21 (Others on request)		
	End connection P235GH for body material GP-240 GH		
	End connection 13CrMo4-5 for body material G 17 CrMo 5-5		
Stem packing	Chevron rings PTFE-graphite		(max. 250 °C)
	Stuffing box pure graphite		(max. 530 °C medium dependent)
	Bellows seal with safety stuffing box		(max. 350 °C PN 100 up to DN 40)
	With TA-Luft		(max. 400 °C)
	Stem packing with DVGW-Approval		(6 bar, 60 °C)
	Stem packing for oxygen with BAM approval		(max. 50 °C)
Trim variations	Shut-off plug 1.4122		(none)
	Parabloic plug 1.4122		(equal% / linear)
	V-port plug 1.4122, Full stellit, Ferro Titanium		(linear)
	Perforated plug 1.4122, 1.4122 hardened		(equal% / linear)
	Mixing- / Diverting plug 1.4122, 1.4408		(linear)
	Balanced plug		(equal% / linear)
	Soft seat PTFE-graphite		
	Seat 1.4571, Stellit		
	Stem 1.4571		
	Others on request		
Version for refrigerants	Chevron packing rings NBR		(-60 °C to 100 °C)
	Chevron rings PTFE-graphite		(-60 °C to 250 °C)
	Seals (gaskets) suitable for refrigerants		
	Bellows seal with safety stuffing box		
	Stem heater with glycerine cup, free from non-ferrous metals		
	Bonnet studs and nuts in stainless steel		
	Epoxy coating		
	Flanges with groove		
Seat leakage	According to DIN EN 1349, Class IV		
	Class IV-S2 according to DIN EN 1349 (lapped in metal to metal)		
	Class VI according to DIN EN 1349 soft seat with PTFE / graphite (max. + 200 °C)		
	According to ANSI / FC / 70-2		
Max. press / temp.	According to DIN EN 1092 / 15 ASME B16.34		
Approvals	ATEX (PV…)		
	TR TS (MV…, PV…, HV…)		
	DGRL (MV…, PV…)		
	DVGW (on request)		

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html

MV 5411

MV 5421

PV 6411

Electric series

Pneumatic series

With electric actuators **ST 5106** **ST 5116**	**With pneumatic actuators** **ST 6175**	**With** **Bellows seal**
MV 5411	PV 6411	–
MV 5414	PV 6414	yes
MV 5421	PV 6421	–
MV 5424	PV 6424	yes
MV 5431	PV 6431	–
MV 5434	PV 6434	yes

Technical data

	DIN		ANSI
Nominal diameter	DN 40 … 400		NPS 1 ½" … 12"
Nominal pressure	PN 16 … 160		Class 150 … 900
Body materials	EN-GJL-250 EN-GJS-400-18-LT GP240GH G17CrMo5-5 GX5CrNiMo19-11-2 Other materials available on request	(PN 16) (PN 16; 25) (PN 16 … 160) (PN 63 … 160) (PN 16 … 40)	SA216 WCB SA351 CF8M SA217 WC9
Flanges	According to DIN 2501; EN 1092-1 and EN 1092-2 Different flanges on request		ASME B 16.5
Butt weld ends	According to DIN 3239 – part 1 or EN 12627 Edge form DIN 2559-21 (Others on request) End connection P235GH for body material GP-240 GH End connection 13CrMo4-5 for body material G 17 CrMo 5-5		
Stem packing	Chevron rings PTFE-graphite Stuffing box pure graphite Bellows seal with safety stuffing box Stem packing with DVGW-Approval Stem packing for oxygen with BAM approval	(max. 250 °C) (max. 530 °C medium dependent) (max. 350 °C) (6 bar, 60 °C) (max. 50 °C)	
Trim variations	Shut-off plug 1.4122 Parabloic plug 1.4122 / 1.4571 V-port plug 1.4122, Full stellit, Ferro Titanium Perforated plug 1.4122, 1.4122 hardened Mixing- / Diverting plug 1.4122, 1.4408 Soft seat PTFE-graphite Seat 1.4571, Stellit Stem 1.4571 Others on request	(none) (equal% / linear) (linear) (equal% / linear) (linear)	
Version for refrigerants	Chevron packing rings NBR Chevron rings PTFE-graphite Seals (gaskets) suitable for refrigerants Bellows seal with safety stuffing box Stem heater with glycerine cup, free from non-ferrous metals Bonnet studs and nuts in stainless steel Epoxy coating Flanges with groove	(-60 °C to 100 °C) (-60 °C to 250 °C)	
Seat leakage	According to DIN EN 1349, Class IV Class IV-S2 according to DIN EN 1349 (lapped in metal to metal) Class VI according to DIN EN 1349 soft seat with PTFE / graphite (max. + 200 °C) According to ANSI / FC / 70-2		
Max. press / temp.	According to DIN EN 1092 / 15 ASME B16.34		
Approvals	ATEX (PV…) TR TS (MV…, PV…, HV…) DGRL (MV…, PV…) DVGW (on request)		

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html

SL Type-B

SL-Type

For liquid media	For gases and vapours
SL Type A	SL Type B

Flow-control silencer / expansion after control valves to reduce noise after choked flow of gases and vapours.
In order to largely suppress cavitation / evaporation in liquid media and sound reduction.

- Suitable for operating temperatures up to 530 ° C
- System of two to four throttle plates
- Including pipe expansion
- Supplied ready to fit including the connecting elements

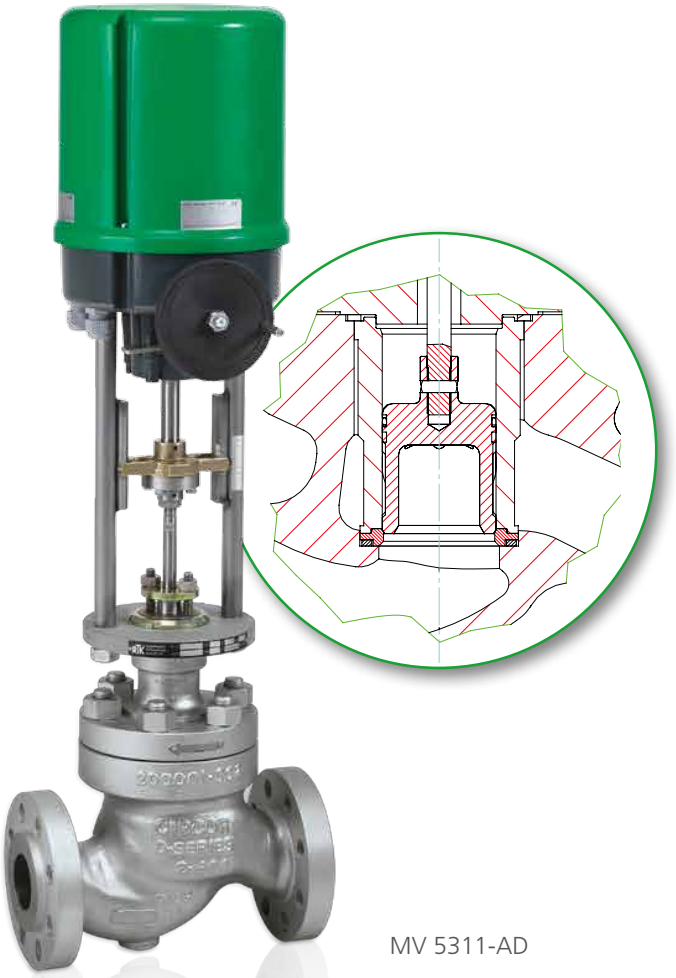
Technical data

Inlet and outlet	PN 40 … 160, Class 300 … 900	
	Different nominal pressure ranges for inlet and outlet on request	
Materials	P250GH	(PN 40 … 160)
	Equivalent to A105	(Class 300 … 900)
	1.4571	(PN 40 … 160)
	Equivalent to A316Ti	(Class 300 … 900)
	13CrMo4-5	(PN 63 … 160)
	Equivalent to A355	(Class 600 … 900)
	Others on request	
Flanges	Connection to EN 1092 form B1	
	Connection to ASME B 16.5	

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html

Heavy duty control valves

PV 6311-AD



MV 5311-AD

Electric series

With electric actuators
ST 5113
ST 5114
ST 5106
ST 5116

MV 5311-AD	PV 6311-AD
MV 5411-AD	PV 6411-AD

Pneumatic series

With pneumatic actuators
ST 6135
ST 6160
ST 6175

All-purpose cage guided globe control valve

- High flow capacities provide larger flow area, reduced body velocity and pressure loss
- Yoke lock nut guarantees easy disassembly
- Hardened / Stainless steel trim provides twice the service life of 316 stainless trim
- Cup seal with three times the wear surface of competitive valves for long lasting leak tight seal
- Multiple cage options for maximum versatility
- Balanced plug design provides smooth high pressure control
- Ultra compact actuators install in tight spaces
- Tighter shut-off design provides exceptional performance up to Class VI
- Compact actuators can easily be installed in tight spaces

Technical data

Body Assembly	Style: Single seated, top entry bolted bonnet, globe style body, cage guided balanced plug	
Nominal diameter	NPS 2" … 16"	
Nominal pressure	ANSI 150 … 1500	2" – 8"
	ANSI 150 … 600	10" – 16"
Body material	Carbon steel, ASTM A216 Gr WCC	
	Chrome moly, ASTM A217 Gr WC9	
	Stainless steel, ASTM Gr CF8M	
Butt weld ends	RF, RTJ, BWE (NPT, SWE nur 2")	
Stem packing	PTFE V-Rings	(-29 °C to 230 °C)
	Laminated graphite	(-29 °C to 566 °C)
Trim Types	Standard, Les-Cav I+II, Les-Sonic I+II	
Flow Characteristics	Equal percentage, Linear	
Trim Materials	Martensitic (series 400) / austenitic (series 300)	
	Standard and high temperature versions	
Trim Sizes	Full port, 80 %, 60 % and 40 % reduced	
	Custom, contact application engineering	
Kvs values	24 – 2666 m^3 / h	
Plug Seal Materials	C300 spring loaded seal with Inconel spring Class IV or V	(max. 300 °C)
	Double carbon-graphite seal rings LeakageClass IV	(max. 538 °C)
Shutoff Class	According ANSI / ISA 70-2	
	Standard trim Leakage Class V Leakage Class IV	 (-29 to 300 °C) (-29 to 427 °C)
	Standard trim Leakage Class IV	 (-29 to 538 °C)
Actuators	Spring and diaphragm	
	280, 530 or 1000 cm^2 actuator	
	Spring closed or spring open	
	Electric	
	Optional: piston, double acting / spring return	

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html

Electric control valves with fail closed unit

MV 5300

Electric series

With electric actuators		Actuators
MV 52 …	Approved by German Technical Inspectorate	ST 5112 ST 6151-5
MV 53 …	Approved by German Technical Inspectorate	ST 5113 ST 6151-5
MV 53 …		ST 5113 ST 6151-6 ST 5114 ST 6151-6
MV 54 …		ST 5106 ST 6152-1 ST 5116 ST 6152-1

Fail close unit for motorized valves
MV 52 … / MV 53 … / MV 54 … series
2 way or 3 way design

- Approved by German Technical Inspectorate DIN EN 14597:2005-12 as safety functional device for steam and water in heating systems.
  (Valid only in combination with ST 6151-5)
- Valve closes on loss of power
- Closes smoothly even at large differential pressures
- Adjustable closing time for ST 6152-1
- Automatic return to normal operation possible

Technical data

Nominal diameter	DN 15 … 100	(Series MV 52 …)
	DN 15 … 150	(Series MV 53 …)
	DN 40 … 250	(Series MV 54 …)
Nominal pressure	PN 16 … 160	
Stem packing	Chevron rings PTFE-graphite	(max. 250 °C)
	Bellows seal with safety stuffing box	(max. 300 °C)
Trim variations	V-port plug	(linear)
	Perforated plug	(equal% / linear)
Seat leakage	Class IV according to DIN EN 1349	
	Class IV-S2 according to DIN EN 1349 (lapped in metal to metal)	

Data sheet under http://www.rtk.de/en/produkte0/stellventile0/electric-and-pneumatic-control-valves-heat-control.html