

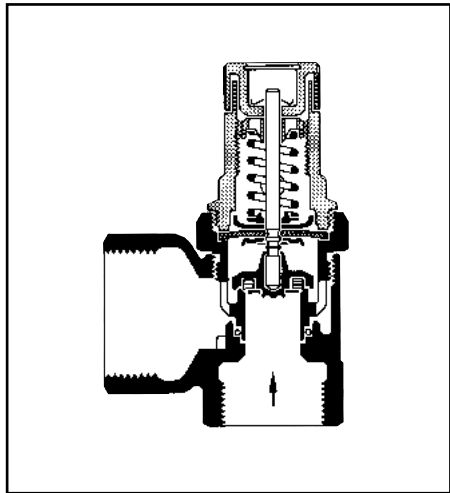
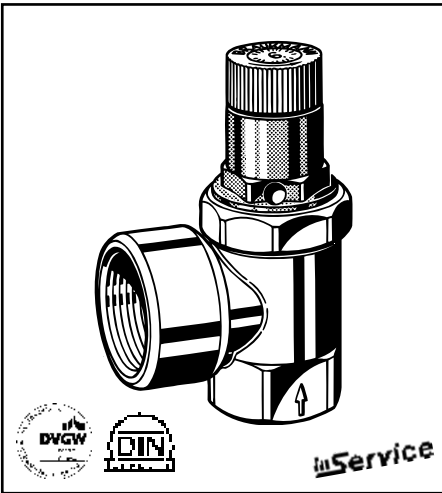
Safety valves, safety groups and thermostatic mixing valves

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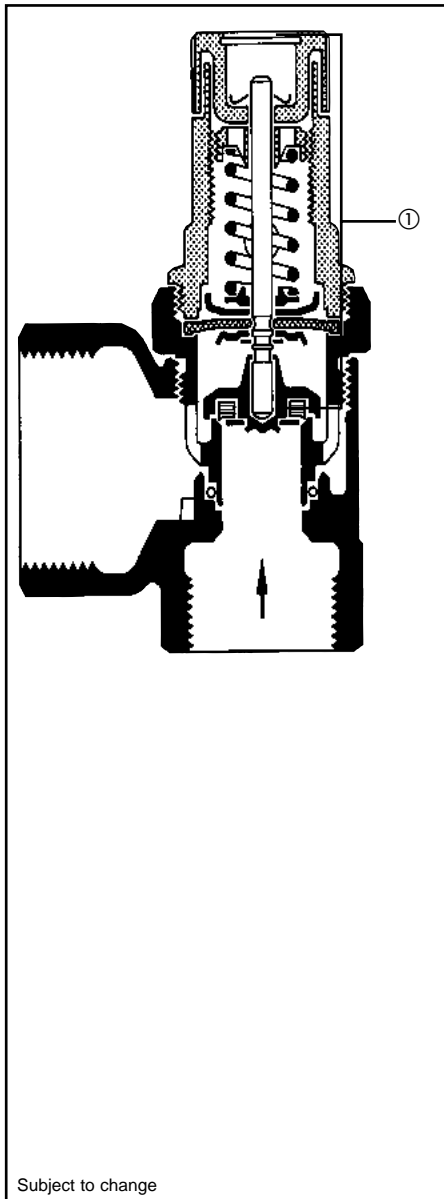
SM 152 diaphragm safety valves

1981 and onwards



SM 152 diaphragm safety valves - Service parts

1981 and onwards



Subject to change

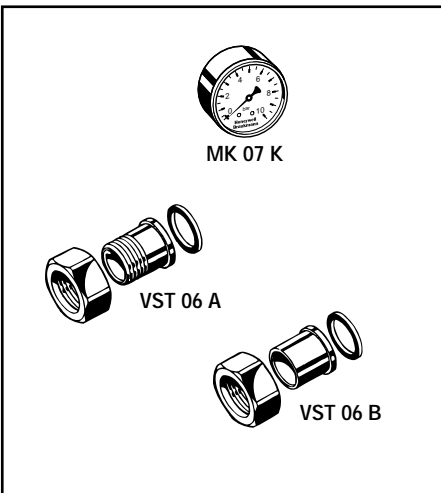
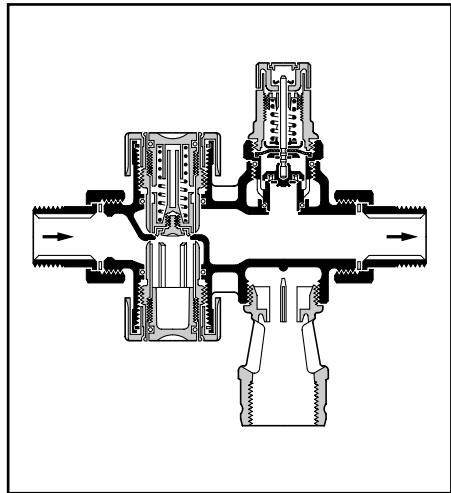
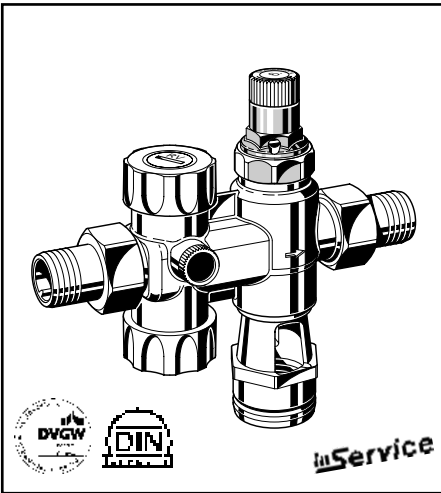
Description	Nominal size	Part number
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① Safety valve insert		
TÜV-tested SV-xx* - 617/1012-1/2" + 3/4" W:p		
TÜV-tested SV-xx* - 700/1012-1/2" + 3/4" W:p		
6 bar	1/2"	A 152 - 1/2 AA
	3/4"	A 152 - 3/4 AA
	1"	A 152 - 1 AA
8 bar	1/2"	A 152 - 1/2 AB
	3/4"	A 152 - 3/4 AB
	1"	A 152 - 1 AB
10 bar	1/2"	A 152 - 1/2 AC
	3/4"	A 152 - 3/4 AC
	1"	A 152 - 1 AC
Safety valve insert chrome plated		
TÜV-tested SV-xx* - 617/1012-1/2" + 3/4" + 1" W:p		
8 bar	1/2"	A 152 - 1/2 BB
	3/4"	A 152 - 3/4 BB
	1"	A 152 - 1 BB
10 bar	1/2"	A 152 - 1/2 BC
	3/4"	A 152 - 3/4 BC
	1"	A 152 - 1 BC
Safety valve exchange set		
TÜV-tested SV-xx* - 616/1012 11/4" W:p		
6 bar	1 1/4"	A 160 - 1 1/4 AA
8 bar	1 1/4"	A 160 - 1 1/4 AB
10 bar	1 1/4"	A 160 - 1 1/4 AC

* xx = Test year

SG 160 safety groups

1987 and onwards

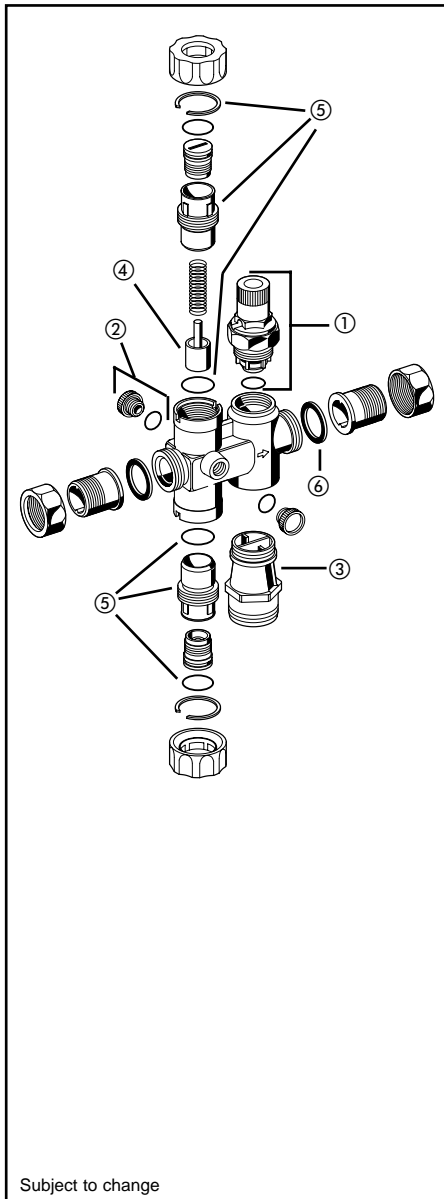


Accessories

- M 07 K** **Pressure gauge**
Housing \varnothing 63 mm, rear connection G 1/4"
Ranges:
0 – 4, 0 – 10, 0 – 16, 0 – 25 bar.
Please state pressure range when ordering
- VST 06** **Connection set**
With threaded or soldered connections
A = threaded tailpiece
B = soldered tailpiece

SG 160 safety groups - Service parts

1987 and onwards

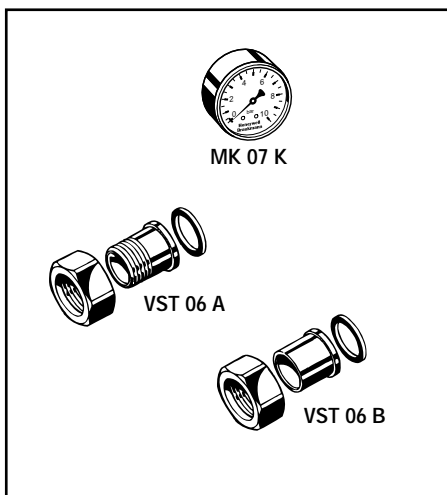
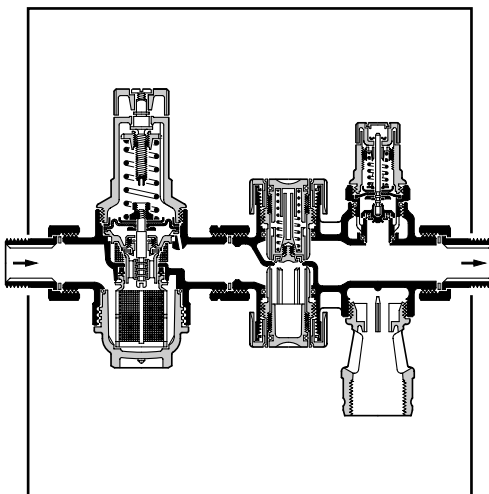
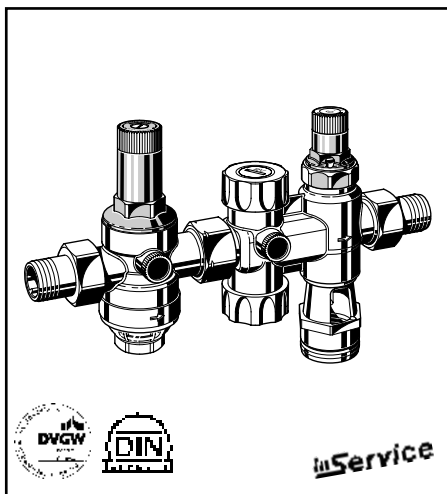


Subject to change

Description	Nominal size	Part number
① Safety valve exchange insert		
TÜV-tested SV-88/93 - 617- $\frac{1}{2}$ " + $\frac{3}{4}$ " W-p		
TÜV-tested SV-88/92 - 700- $\frac{1}{2}$ " + $\frac{3}{4}$ " W-p		
6 bar	$\frac{1}{2}$ " - 1"	A 152 - $\frac{3}{4}$ " AA
8 bar	$\frac{1}{2}$ " - 1"	A 152 - $\frac{3}{4}$ " AB
10 bar	$\frac{1}{2}$ " - 1"	A 152 - $\frac{3}{4}$ " AC
Safety valve exchange insert, chrome plated screw in insert		
TÜV-tested SV-88/93 - 617- $\frac{1}{2}$ " + $\frac{3}{4}$ " W-p		
8 bar	$\frac{1}{2}$ " - 1"	A 152 - $\frac{3}{4}$ " BB
10 bar	$\frac{1}{2}$ " - 1"	A 152 - $\frac{3}{4}$ " BC
② Blanking plug set with O-ring R $\frac{1}{4}$ " (pack of 5)	$\frac{1}{2}$ " - 1"	S 06 K - $\frac{1}{4}$ "
③ Tundish	$\frac{1}{2}$ " $\frac{3}{4}$ " + 1"	TA 160 - $\frac{3}{4}$ " A TA 160 - 1 B
④ Disc complete	$\frac{1}{2}$ " $\frac{3}{4}$ " + 1"	0900700 0900702
⑤ Shutoff insert complete	$\frac{1}{2}$ " $\frac{3}{4}$ " + 1"	0900699 0900701
⑥ Seal ring set (pack of 10)	$\frac{1}{2}$ " $\frac{3}{4}$ " 1"	0901443 0901444 0901445

SG 160 D safety groups

1987 and onwards

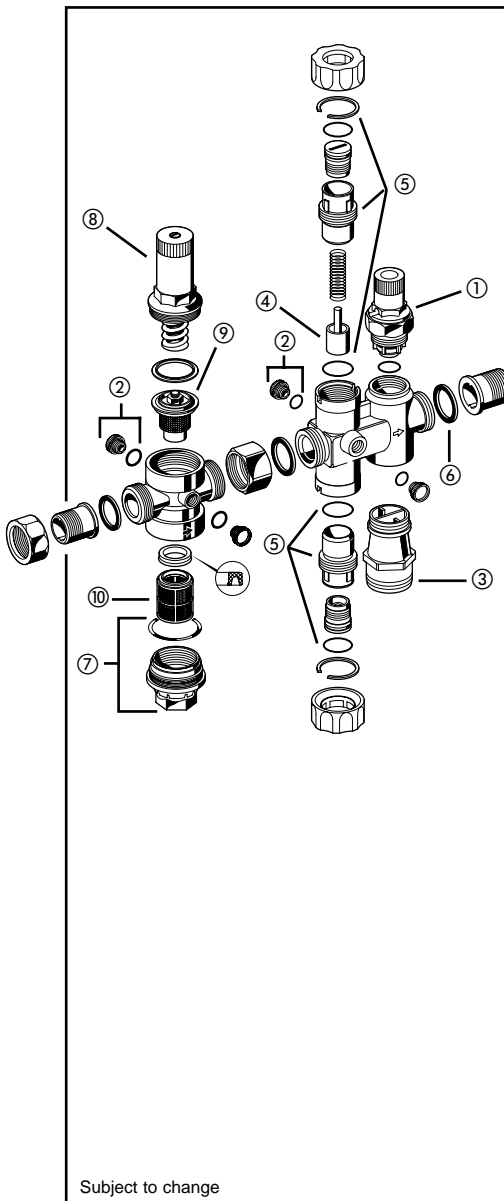


Accessories

- M 07 K** Pressure gauge
Housing \varnothing 63 mm, rear connection G $\frac{1}{4}$ "
Ranges:
0 – 4, 0 – 10, 0 – 16, 0 – 25 bar.
Please state pressure range when ordering
- VST 06** Connection set
With threaded or soldered connections
A = threaded tailpiece
B = soldered tailpiece

SG 160 D safety groups - Service parts

1987 and onwards

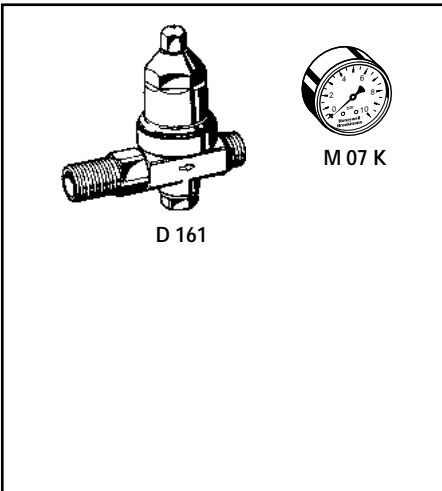
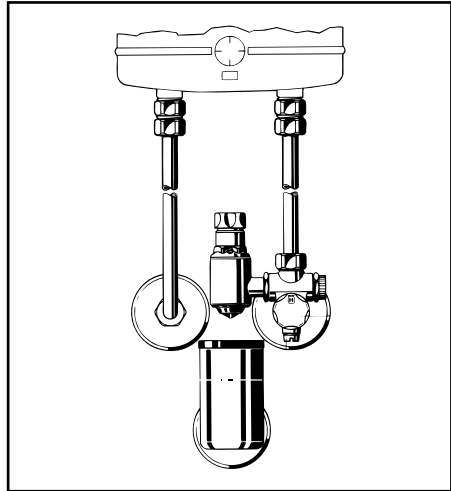
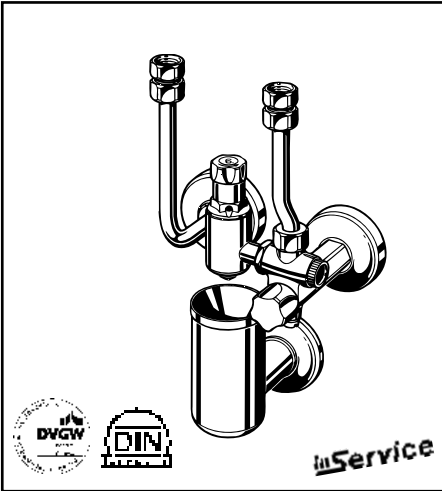


Subject to change

Description	Nominal size	Part number
① Safety valve exchange insert TÜV-tested SV-88/93 - 617 - 1/2" + 3/4" W:p TÜV-tested SV-88/92 - 700 - 1/2" + 3/4" W:p	6 bar 1/2" - 1" 8 bar 1/2" - 1" 10 bar 1/2" - 1"	A 152 - 3/4" AA A 152 - 3/4" AB A 152 - 3/4" AC
Safety valve exchange insert, chrome plated screw in insert TÜV-tested SV-88/93 - 617 - 1/2" + 3/4" W:p	8 bar 1/2" - 1" 10 bar 1/2" - 1"	A 152 - 3/4" BB A 152 - 3/4" BC
② Blanking plug set with O-ring R 1/4" (pack of 5)	1/2" - 1"	S 06 K - 1/4
③ Tundish	1/2" 3/4" + 1"	TA 160 - 3/4 A TA 160 - 1 B
④ Disc complete	1/2" 3/4" + 1"	0900700 0900702
⑤ Shutoff insert complete	1/2" 3/4" + 1"	0900699 0900701
⑥ Seal ring set (pack of 10)	1/2" 3/4"	0901443 0901444
⑦ Clear filter bowl	1/2" - 1	SK 06 TG - 1/2
⑧ Spring bonnet	1/2" - 1	0900152
⑨ Valve exchange insert complete 1/2" - 1 (without filter sieve)		D 06 FA - 1/2
⑩ Replacement filter insert	1/2" - 1	ES 06 F - 1/2 A

SG 161 safety groups

1990 to 1997

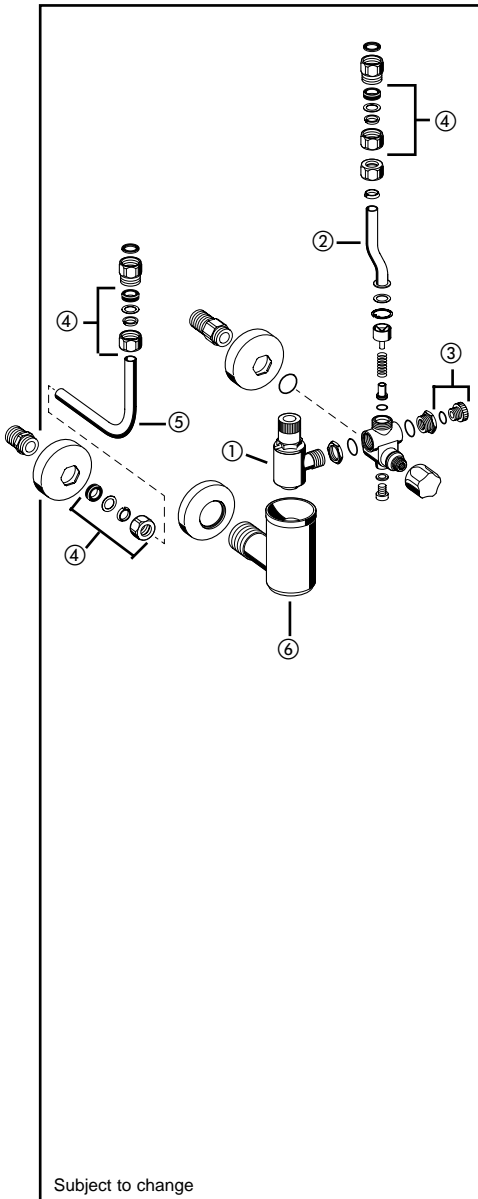


Accessories

- D 161** Pressure reducing valve
For retrofitting to SG 161
A = Set pressure 4.0 bar
- M 07 K** Pressure gauge
Housing \varnothing 63 mm, rear connection
G $1/4$ "
Ranges:
0 – 4, 0 – 10, 0 – 16, 0 – 25 bar.
Please state pressure range when
ordering

SG 161 safety groups - Service parts

1990 to 1997

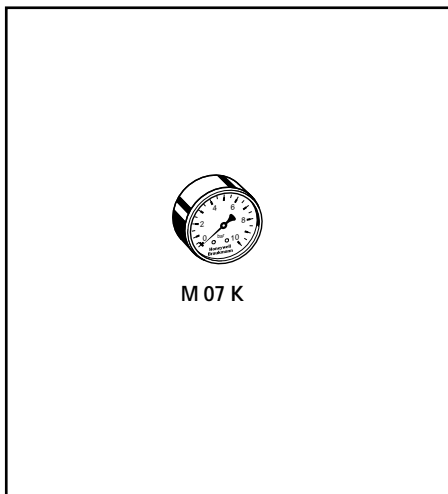
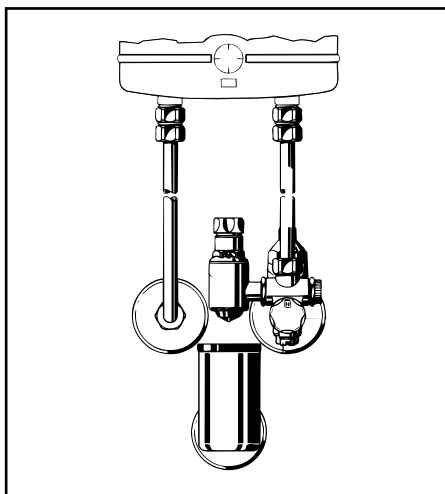
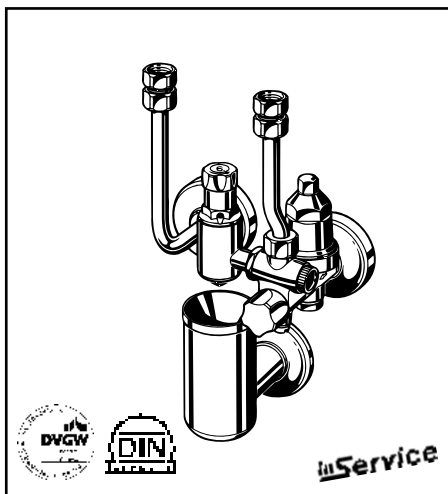


Description	Nominal size	Part number
① Safety valve exchange insert complete TÜV tested SV · 90 - 771 - 1/2" · W · p		
6 bar	1/2"	A 161 - BA
10 bar	1/2"	A 161 - BC
② Bent flanged tube connector	1/2"	2596600
③ Blanking plug set with O-ring R 1/4" (pack of 5)	1/2"	S 06 K - 1/4
④ Fittings set complete	1/2"	0900625
⑤ Angle tube C	1/2"	2597200
⑥ Tundish	1/2"	0901768

Subject to change

SG 161 D safety groups

1990 to 1997

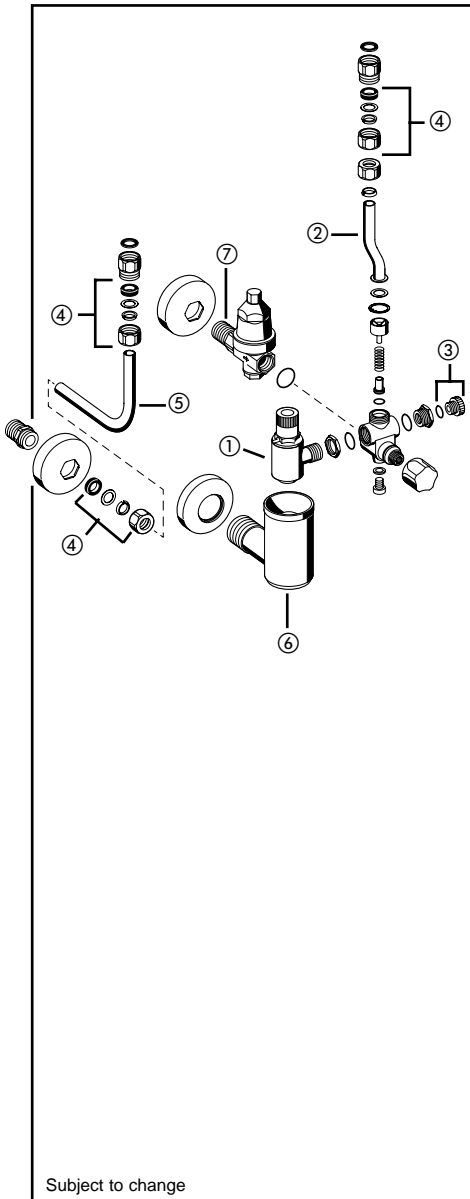


Accessories

- M 07** **Pressure gauge**
Housing Ø 63 mm, rear
connection G 1/4"
Ranges:
0 – 4, 0 – 10, 0 – 16, 0 – 25 bar.
Please state pressure range when
ordering

SG 161 D safety groups - Service parts

1990 to 1997

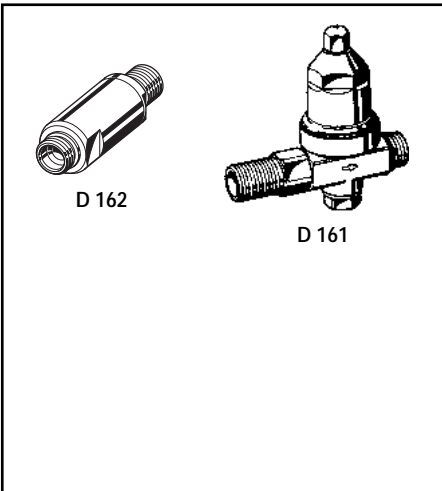
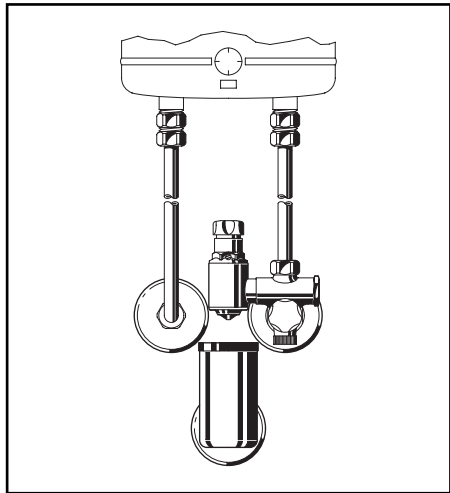
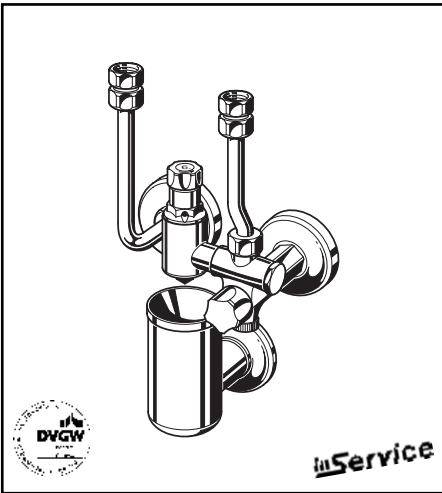


Subject to change

Description	Nominal size	Part number
① Safety valve exchange insert complete TÜV tested SV · 90 - 771-1/2" · W · p 6 bar 10 bar	1/2" 1/2"	A 161 - BA A 161 - BC
② Bent flanged tube connector	1/2"	2596600
③ Blanking plug set with O-ring R 1/4" (pack of 5)	1/2"	S 06 K - 1/4
④ Fittings set complete	1/2"	0900625
⑤ Angle tube C	1/2"	2597200
⑥ Tundish	1/2"	TS 161 - 1 A
⑦ Pressure reducing valve	1/2"	D 161 - 1/2 A

SG 162 safety groups

1998 and onwards

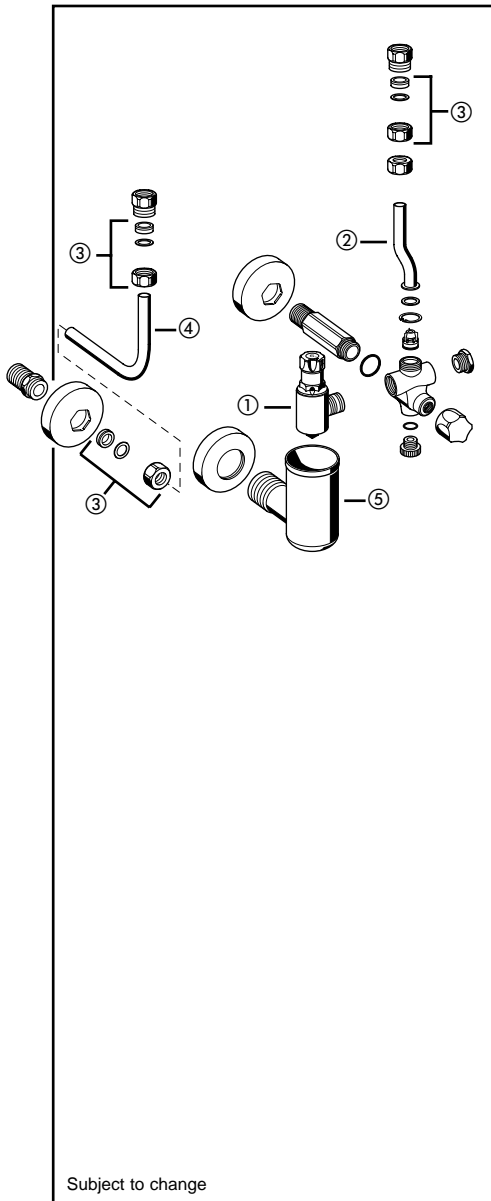


Accessories

- D 161** **Pressure reducing valve**
For retrofitting to SG 162
Set pressure range 1.0 to 6.0 bar
Set during manufacture at 4.0 bar
- D 162** **Pressure reducing valve**
For retrofitting to SG 162
Non-adjustable fixed setting 4.0 bar

SG 162 safety groups - Service parts

1998 and onwards

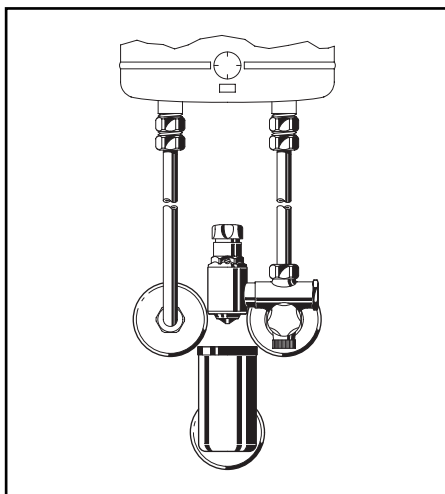
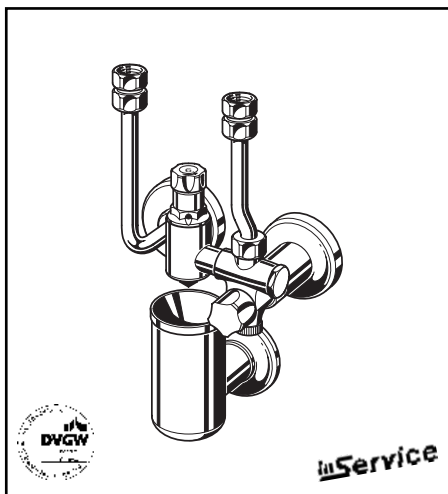


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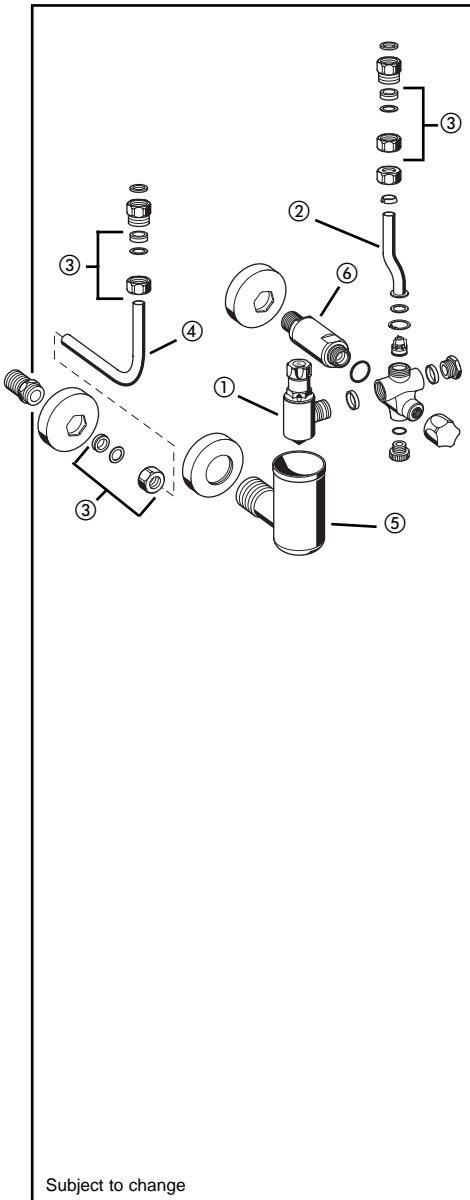
Description	Nominal size	Part number
① Safety valve exchange insert complete TÜV tested SV · 95 - 771-1/2" · W · p		
6 bar	1/2"	A 161 - BA
10 bar	1/2"	A 161 - BC
② Bent flanged tube connector	1/2"	2596600
③ Fittings set complete	1/2"	0900625
④ Angle tube C	1/2"	2597200
⑤ Tundish	1/2"	0901768

SG 162 D safety groups with pressure reducing valve

1998 and onwards



SG 162 D safety groups with pressure reducing valve - Service parts 1998 and onwards

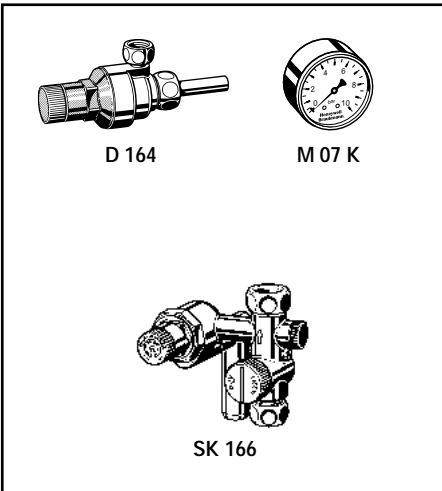
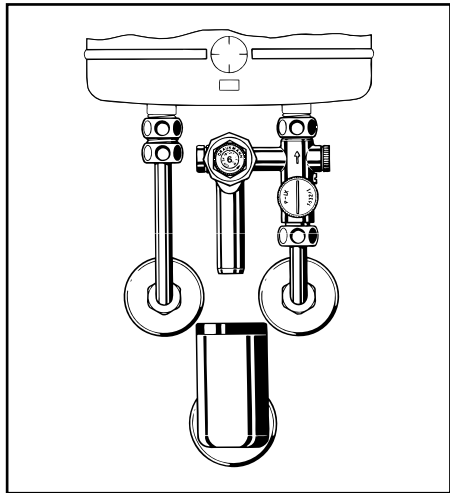
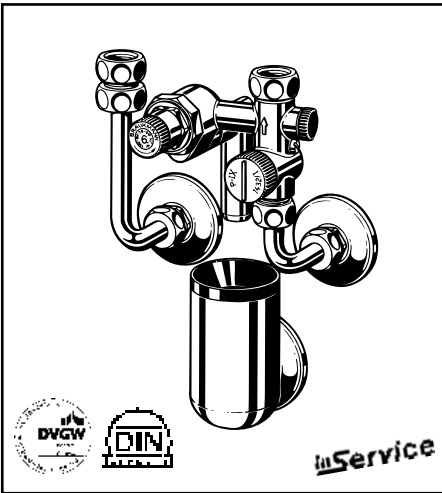


Subject to change

Description	Nominal size	Part number
① Safety valve exchange insert complete TÜV tested · SV · 95 - 771- 1/2 · W · p		
6 bar	1/2"	A 162 - BA
10 bar	1/2"	A 162 - BC
② Flanged offset angled tube connector	1/2"	2596600
③ Fittings set complete	1/2"	0900625
④ Angle tube C	1/2"	2597200
⑤ Tundish	1/2"	0901768
⑥ Pressure reducing valve	1/2"	D 162 - 1/2" A

SK 164 safety valve combinations

From 1980 to 1998

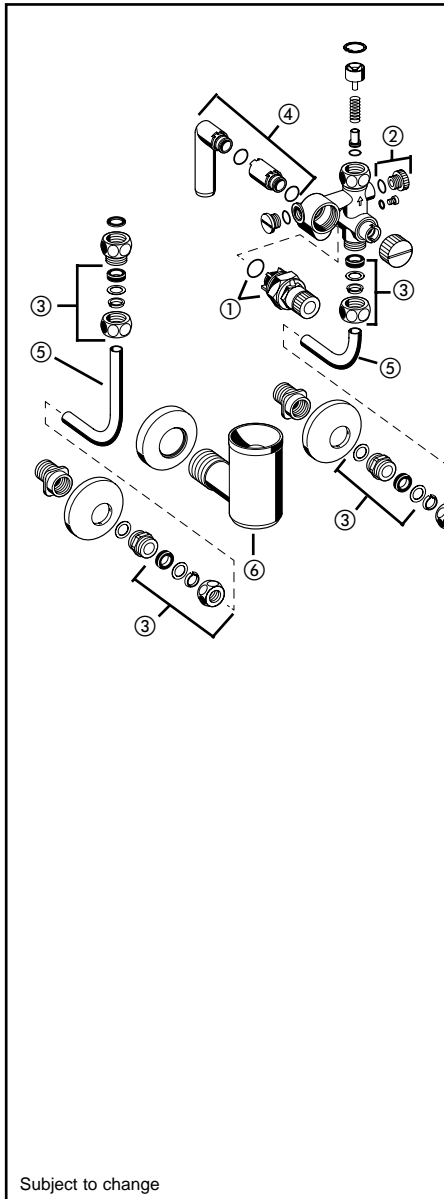


Accessories

- D 164** **Pressure reducing valve**
 For retrofitting to SK 164 safety valve combination. DVGW tested for construction and noise, Group I without limitation.
 A = Set pressure 4.0 bar
- SK 166** **Safety valve combination**
 As SK 164 but without connection pipes or tundish.
 A = Safety valve, set pressure 6.0 bar
 C = Safety valve, set pressure 10.0 bar
- M 07 K** **Pressure gauge**
 Housing Ø 63 mm, rear connection G 1/4"
 Ranges:
 0 – 4, 0 – 10, 0 – 16, 0 – 25 bar.
 Please state pressure range when ordering

SK 164 safety valve combinations - Service parts

From 1980 to 1998

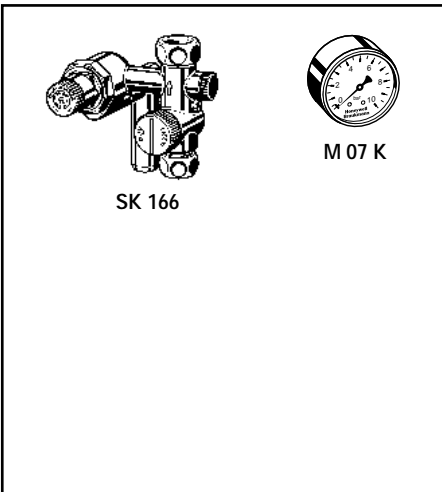
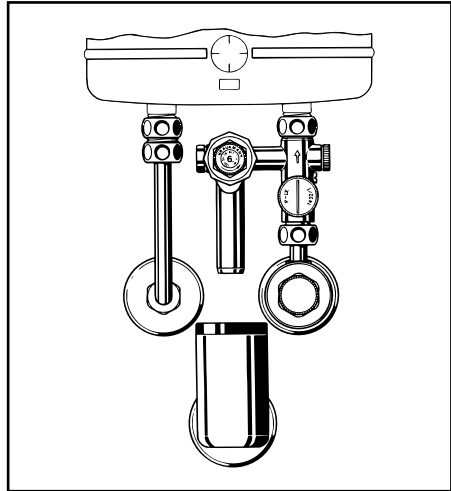
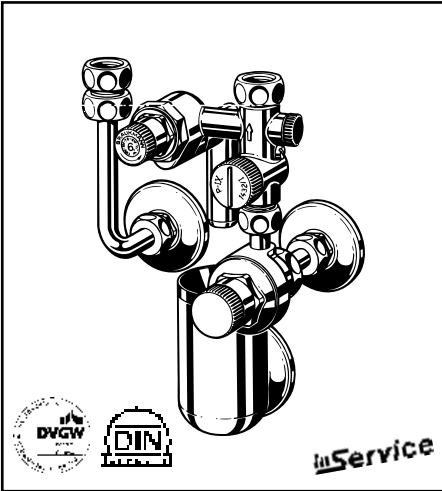


Subject to change

Description	Nominal size	Part number
① Safety valve exchange insert complete TÜV tested · SV · 83/88/92 - 700- $\frac{1}{2}$ " + $\frac{3}{4}$ " Wp 6 bar	$\frac{1}{2}$ "	A 152 - $\frac{3}{4}$ AA
Safety valve exchange insert, chrome plated screw in insert TÜV tested · SV · 83/88/93 - 617- $\frac{1}{2}$ " + $\frac{3}{4}$ " Wp 8 bar 10 bar	$\frac{1}{2}$ " $\frac{1}{2}$ "	A 152 - $\frac{3}{4}$ BB A 152 - $\frac{3}{4}$ BC
② Blanking plug set with O-ring R $\frac{1}{4}$ " (pack of 5)	$\frac{1}{2}$ "	S 06 K - $\frac{1}{4}$
③ Fittings set complete	$\frac{1}{2}$ "	0900625
④ Discharge pipe complete	$\frac{1}{2}$ "	0900624
⑤ Angle tube	$\frac{1}{2}$ "	2705800
⑥ Tundish	$\frac{1}{2}$ "	TS 164 - 1 B

SK 164 D safety valve combinations

From 1980 to 1998

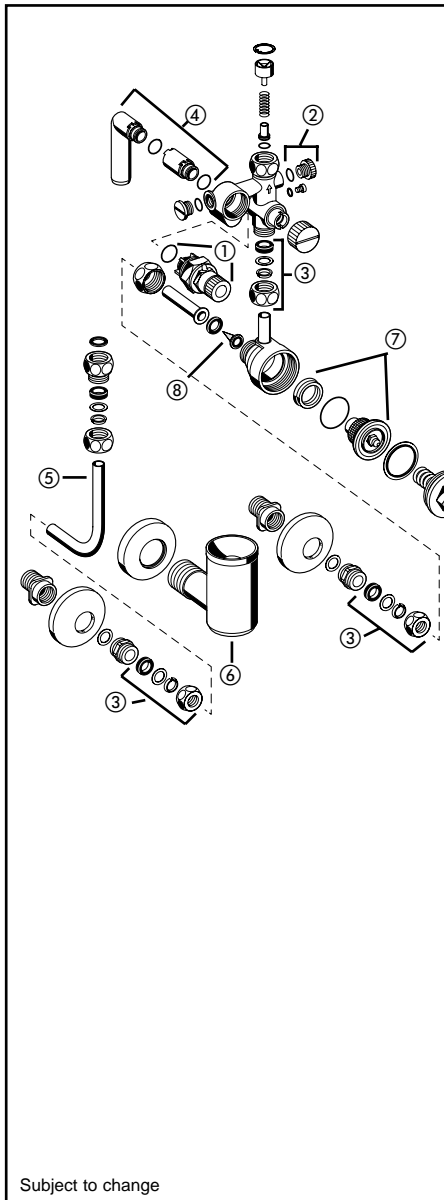


Accessories

- M 07 K** **Pressure gauge**
Housing \varnothing 63 mm, rear connection G 1/4"
Ranges:
0 – 4, 0 – 10, 0 – 16, 0 – 25 bar.
Please state pressure range when ordering
- SK 166** **Safety valve combination**
As SK 164 but without connector tubes or tundish.
A = Safety valve,
 set pressure 6.0 bar
C = Safety valve,
 set pressure 10.0 bar

SK 164 D safety valve combinations - Service parts

From 1980 to 1998



Subject to change

Description	Nominal size	Part number
① Safety valve exchange insert complete TÜV tested · SV · 83/88/92 - 700- $\frac{1}{2}$ " + $\frac{3}{4}$ " Wp 6 bar	$\frac{1}{2}$ "	A 152 - $\frac{3}{4}$ AA
Safety valve exchange insert, chrome plated screw in insert TÜV tested · SV · 83/88/93 - 617- $\frac{1}{2}$ " + $\frac{3}{4}$ " Wp 8 bar 10 bar	$\frac{1}{2}$ " $\frac{1}{2}$ "	A 152 - $\frac{3}{4}$ BB A 152 - $\frac{3}{4}$ BC
② Blanking plug set with O-ring R $\frac{1}{4}$ " (pack of 5)	$\frac{1}{2}$ "	S 06 K - $\frac{1}{4}$
③ Fittings set complete	$\frac{1}{2}$ "	0900625
④ Discharge pipe complete	$\frac{1}{2}$ "	0900624
⑤ Angle tube	$\frac{1}{2}$ "	2705800
⑥ Tundish	$\frac{1}{2}$ "	TS 164 - 1 B
⑦ Valve exchange set complete	$\frac{1}{2}$ "	D 06 FA - $\frac{1}{2}$
⑧ Filter insert	$\frac{1}{2}$ "	2974100

Safety valves and safety groups - What to do if...

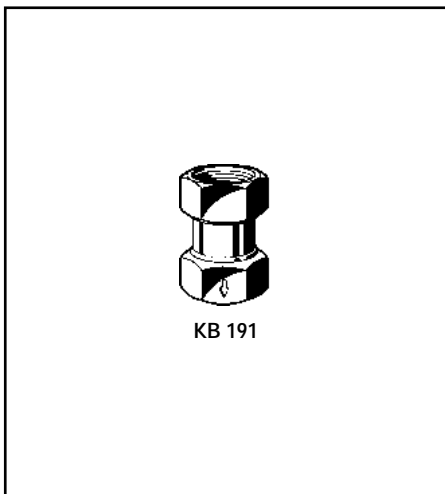
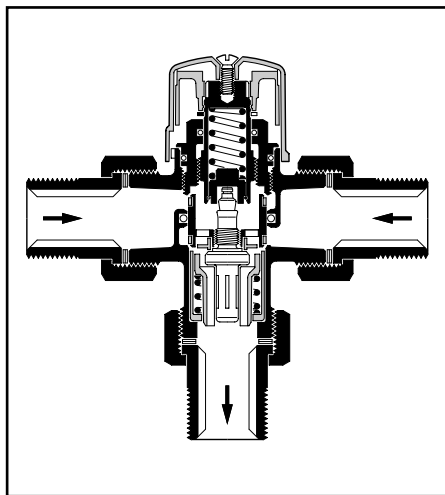
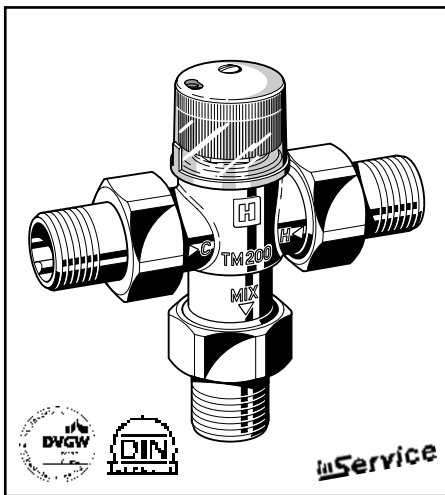
Problem	Cause	Solution
Drips	<ul style="list-style-type: none"> - during heat up of the hot water unit - drips constantly because of dirt 	<ul style="list-style-type: none"> - Not a fault, this is normal - Operate venting knob several times to dislodge dirt, or replace if necessary
No, or too little water pressure	<ul style="list-style-type: none"> - Shutoff valves before and/or after are not fully open - Valve disc in flow regulator blocked - Pressure reducing valve not set to the required value - Filter in pressure reducing valve dirty - Appliance fitted wrong way round 	<ul style="list-style-type: none"> - Open shutoff valves fully - Carry out maintenance service on flow regulating valve - Adjust pressure reducing valve using knurled adjuster knob - Undo filter bowl and replace filter insert - Fit in correct flow direction
Set pressure does not remain constant and there is unwanted pressure rise	<ul style="list-style-type: none"> - Expansion water from the hot water unit (also see „unwanted pressure rise“ in miscellaneous section) - Insert in D 06 FA pressure reducing valve dirty or worn 	<ul style="list-style-type: none"> - Close shutoff valve to water heater. Open hot water outlet. Does the pressure now remain constant? → Cause is expansion from water heater. Does pressure still rise? → Then pressure reducing valve is faulty - Test check valve upstream of water heater and if appropriate also single lever mixer tap - Replace D 06 FA pressure reducing valve insert and fluted ring and lubricate

Safety valves and safety groups - What to do if...

Problem	Cause	Solution
Hammering noises	– Integral non-return check valve in water metering system hammering	– Remove or carry out maintenance service on check valve after consultation with water supplier
	– Loose and therefore vibrating discs in shutoff devices	– Check shutoff devices and if necessary carry out maintenance service on them
	– Air pocket in redundant or little used sections of pipework	– Vent
	– Fast closing of flushing valve	– Check flushing valve and replace if necessary
	– Solenoid valves in dishwashing machine or washing machine	– Fit shock arrestor (e.g. Flamco) on flow to appliances
	– Faulty anti-vacuum or vent valve	– Carry out maintenance service on device
Water comes out of the spring bonnet	– Diaphragm in valve insert faulty	– Disassemble pressure reducing valve and replace valve insert
No, or too little flow	– Shutoff valve before and/or after non-return check valve not fully open	– Fully open shutoff valves
Non-return check valve inlet does not close properly	– Pressure rise at inlet area	– Change valve disc and lip seal
	– Seal surfaces dirty or worn	– Clean seal elements and replace if necessary

TM 200 thermostatic mixing valve

1996 and onwards



Accessories

KB 191 Return flow retarder unit
for fitting in systems which include a secondary circulation circuit. To prevent cold water back feeding and cooling the mixed water at the outlets.

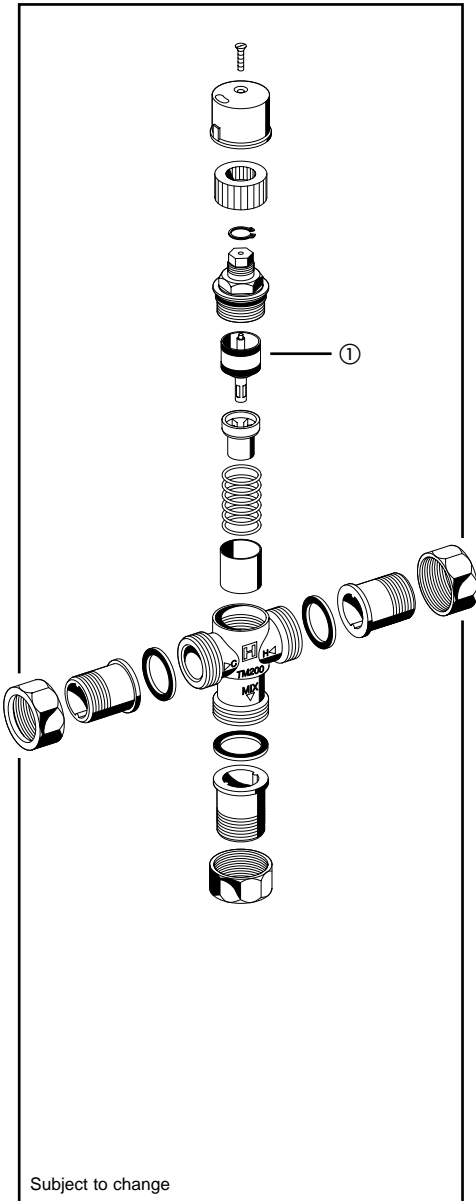
Operating pressure: max. 10 bar

Temperature: max. 90 °C

Installation orientation: Arrow in direction of flow

TM 200 thermostatic mixing valve

1996 and onwards

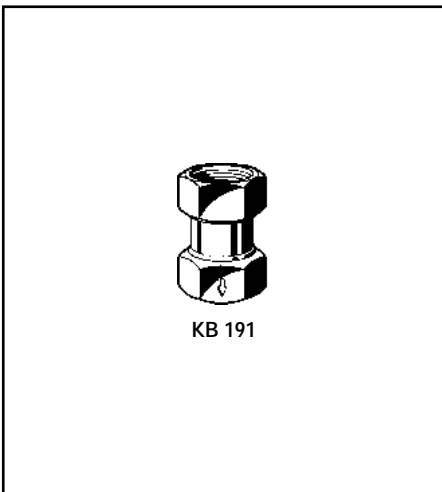
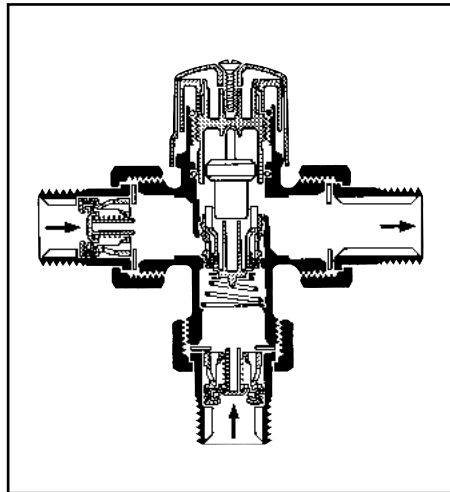
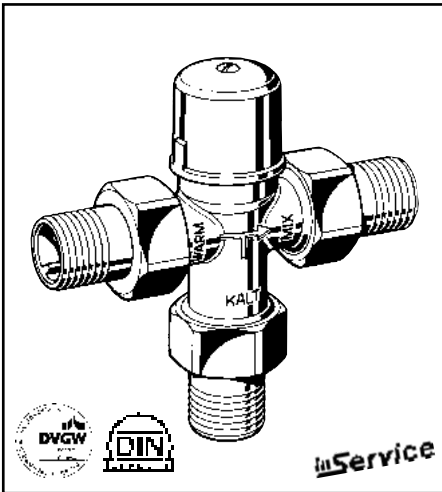


Subject to change

Description	Nominal size	Part number
① Control piston complete		0901860
	TM 200 A - 30/60	

TB 190 thermostatic mixing valve

1994 and onwards



Accessories

- KB 191** **Return flow retarder unit**
for fitting in systems which include a secondary circulation circuit. To prevent cold water back feeding and cooling the mixed water at the outlets.

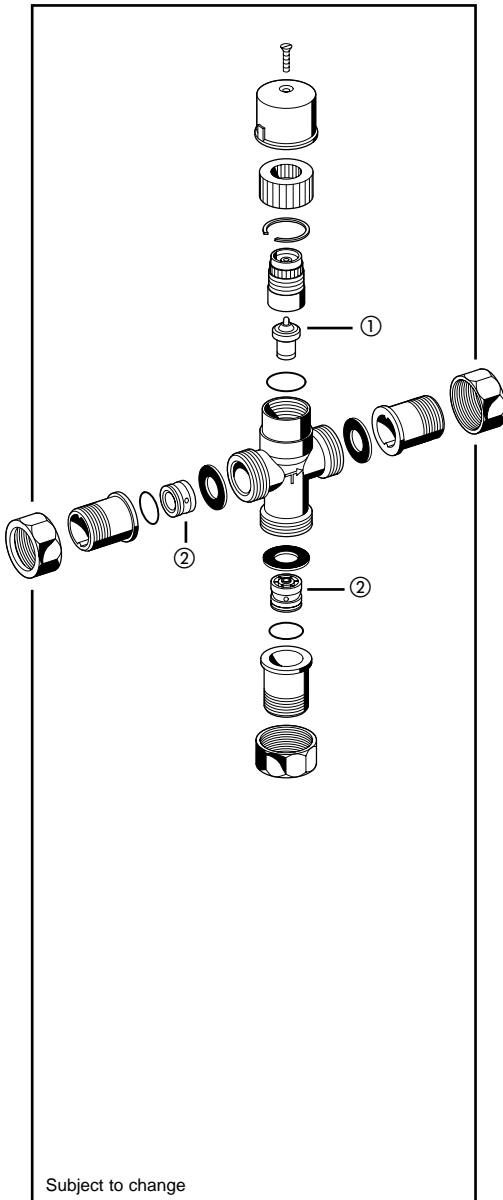
Operating pressure: max. 10 bar

Temperature: max. 80 °C

Installation orientation: Vertical

TB 190 thermostatic mixing valve - Service parts

1994 and onwards



Description	Nomonal size	Part number
① Thermal element	3/4"	5710700
② Non-return check valve complete	3/4"	RV 282 H - 1/2

Thermostatic mixing valves - What to do if...

Problem	Cause	Solution
Large fluctuation of mixed temperature	<ul style="list-style-type: none">– Pressure difference between hot and cold inlets too great– Control piston dirty– Thermal element worn	<ul style="list-style-type: none">– Install central pressure reducing valve– Clean or replace if necessary– Replace