

T 2570 EN

Spare parts and accessories · Self-operated regulators for cryogenic media

Connecting components · Non-return units · Service kits · Conversion kits · Others

Application

Spare parts and accessories for Series 2357 Regulators and Type 2040 Safety Temperature Monitor

All parts cleaned and packed in bags to protect them from contamination (free of oil and grease) for oxygen service (provided not labeled otherwise).

SAMSON offers the following spare parts (parts subject to wear) and accessories for the safe and reliable functioning of regulators:

- **Connecting components**

Soldering nipples with ball-type bushings including coupling nuts for installation in pipelines. The nipples are soldered at the site of installation.

Welding ends including coupling nuts for installation in pipelines. The welding ends are welded at the site of installation.

- **Non-return unit**

Prevents the medium from flowing back into the valve.

- **Service kits**

Parts subject to wear, e.g. plugs, diaphragms and seals.

- **Conversion kits**

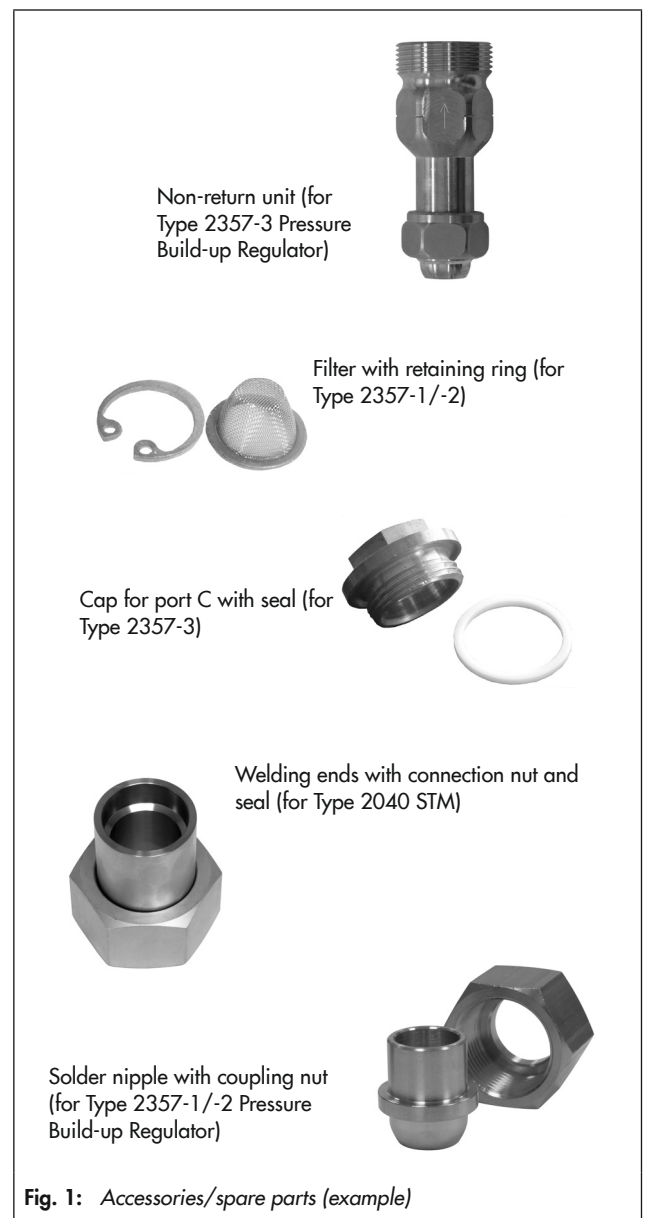
Springs, diaphragms or operating bellows to change the set point range of regulators.

- **Others**

Filters, accessories to raise the downstream pressure, caps etc.

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Type 2357-1/-2 Pressure Regulators · T 2557

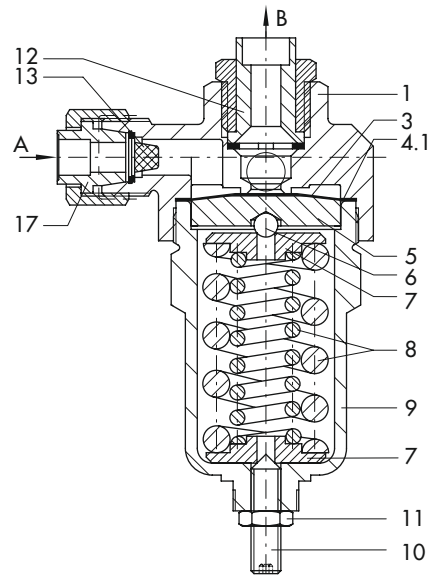
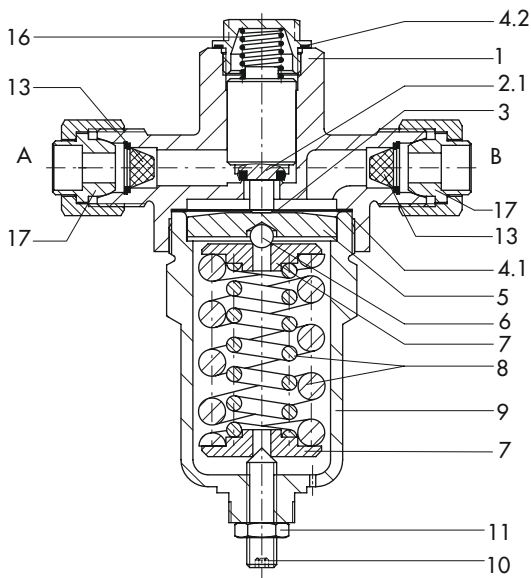


Fig. 2: Type 2357-1 Pressure Build-up Regulator or Pressure Reducing Valve (PN 50)

Fig. 3: Type 2357-2 Excess Pressure Valve (PN 50)

1 Valve body	4.2 Seal (top section of body)	8 Set point springs	12 Non-return unit (accessories)
2.1 Plug	5 Diaphragm plate	9 Bottom section of the housing	13 Filter
3 Operating diaphragm	6 Ball	10 Set point adjuster (hex socket, SW 5)	16 Plug spring
4.1 Gasket (bottom section of the body)	7 Spring plate	11 Lock nut (SW 17)	17 Solder nipple with ball-type bushing (accessories)

Table 1: Spare parts and accessories · Type 2357-1/-2

Position	Spare parts/accessories	Order no.				
		PN 40		PN 50		
		1 to 25	10 to 36	1 to 8	5 to 25	8 to 40
	Pressure rating					
	Set point range in bar					
	Number of diaphragms					
4.1 · 8	Conversion kit (set point range)	1402-0716	1402-0717	1402-0720	1402-0721	1402-0722
3	Service kit including 10 diaphragms	1400-7625		1400-7622		
	Service kit including 20 diaphragms	1400-7626		1400-7623		
4.1	Service kit including 20 seals	1402-0709		1402-0708		
2.1 · 4.2	Conversion kit (plug)	1402-0715		1402-0713		
2.1 · 4.2	Conversion kit (hex plug)	-		1402-0714		
2.1 · 3 · 4.1 · 4.2	Conversion kit (plug)	-		1402-0725		
4.2	Service kit including 20 seals	1402-1728				
12	Non-return unit for Type 2357-2 (used as an economizer)	1402-0703 (Ø15 mm) 1402-0704 (Ø16 mm)				
	Solder nipple with 1 mm hole to raise the downstream pressure (for Type 2357-2), used for pressure relief ($\Delta p > 3$ bar; reduction of K_{VS} to 0.02) · No non-return unit	1400-7303 (1x Ø15) 1400-7304 (1x Ø16, standard for Type 2357-2)				
17	Solder nipple	1400-9897 (1x Ø12) 1400-5133 (1x Ø15) 1400-5138 (1x Ø16, standard for Type 2357-2) 1400-5134 (2x Ø15) 1400-5137 (2x Ø16, standard for Type 2357-1)				
	Solder nipple without coupling nut	1400-9560 (1 x Ø12)				
	Welding ends	1400-9519 (2 x Ø21.3 x 1.6 mm)				
13	Filter	1402-2116 (1 x 270 x 10 ⁻⁶ m mesh size)				
	Orifice plate for Type 2357-1	1400-5130 (Ø4 mm hole, 1x Ø15 mm) 1400-5131 (blank, 1x Ø15 mm)				
6	Ball	1402-0726				

Type 2357-11/-21 Pressure Regulators · T 2560

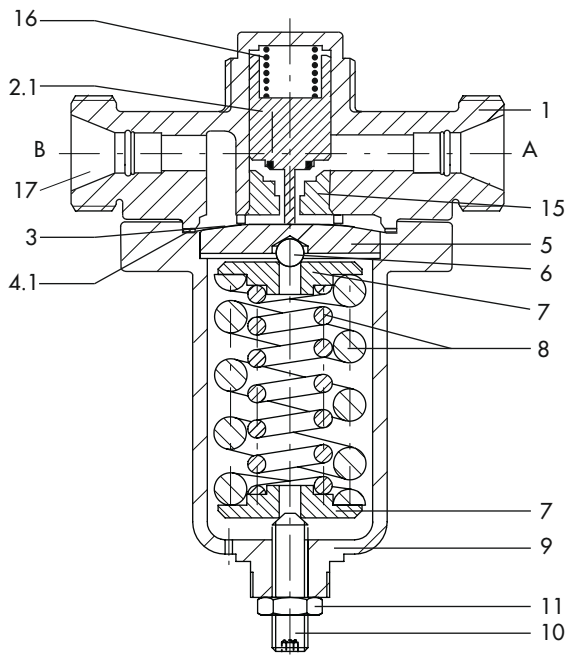


Fig. 4: Type 2357-11 Pressure Reducing Valve

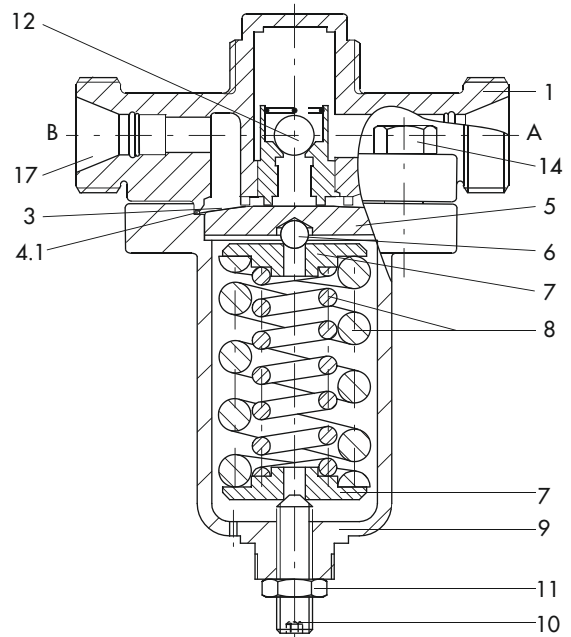


Fig. 5: Type 2357-21 Excess Pressure Valve

1	Valve body	7	Spring plate	14	Body screws
2.1	Plug	8	Set point springs	15	Seat
3	Operating diaphragm	9	Bottom section of the body (spring housing)	16	Plug spring
4.1	Gasket (bottom section of the body)	10	Set point adjuster (hex socket, SW 5)	Accessories (coupling nut with ball-type bushing and welding end or flange)	
5	Diaphragm plate	11	Lock nut (SW 17)	17	
6	Ball	12	Integrated non-return unit		

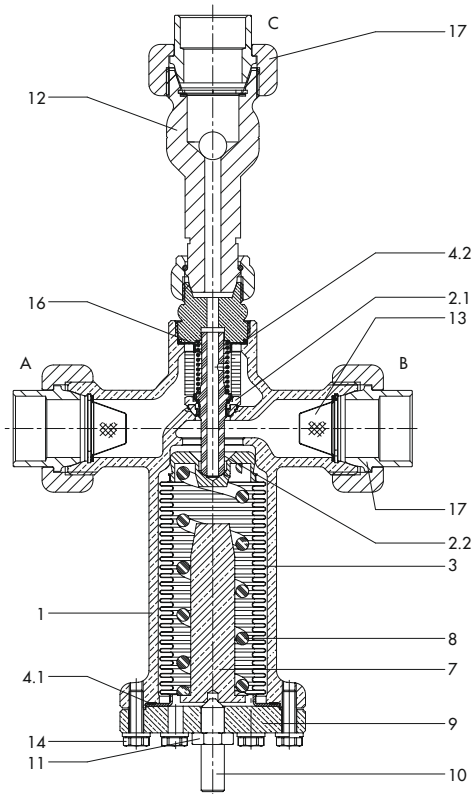
Table 2: Spare parts and accessories · Type 2357-11/-21

Position	Spare parts/accessories	Order no.		
		1 to 8	5 to 25	8 to 40
	Set point range in bar			
	Pressure rating	PN 63		
	Number of diaphragms · Inside diaphragms made of CuBe · Outer diaphragms made of 1.4404	3	5	7
4.1 · 8	Conversion kit (set point range)	1402-0720	1402-0721	1402-0722
3 · 4.1	Service kit with 7 + 2 diaphragms ¹⁾	1402-0649		
4.1	Service kit including 20 seals	1402-0708		
2.1 · 4.2	Conversion kit (plug)	1402-0878		
4.1 · 15	Conversion kit (seat)	1402-0879		
17	Screwed-on flanges	1402-0434 (2x DN 25, PN 40) 1402-0594 (2x NPS 1, Class 300)		
	Welding ends	1400-9519 (2x Ø21.3x1.6 mm)		
	Welding ends (outlet side with 1 mm hole) to raise the downstream pressure (for Type 2357-21), used for pressure relief ($\Delta p > 3$ bar; reduction of K_{VS} to 0.02)	1402-0514		
	Welding ends (outlet side with 2.5 mm hole) to raise the downstream pressure (for Type 2357-21)	1402-0685 (2x Ø21.3x1.6 mm)		
n. d. ²⁾	Cap for leakage line connection	1402-0687		
n. d. ²⁾	Service kit including 10 seals for leakage line connection	1402-0880		
6	Ball	1402-0726		

¹⁾ Application for industrial gases

²⁾ Not shown

Type 2357-3 Pressure Build-up Regulator · ▶ T 2559



- 1 Valve body
- 2.1 Pressure build-up plug
- 2.2 Tubular plug
- 3 Operating bellows
- 4.1 Seal (body cover)
- 4.2 Seal (top section of body)
- 7 Spring plate
- 8 Set point springs
- 9 Body cover
- 10 Set point adjuster (hex socket, SW 5)
- 11 Lock nut (SW 17)
- 12 Non-return unit (accessories)
- 13 Filter
- 14 Body screws
- 16 Closing spring
- 17 Solder nipple with ball-type bushing (accessories)

Fig. 6: Type 2357-3 Pressure Build-up Regulator

Table 3: Spare parts and accessories · Type 2357-3

Position	Spare parts/accessories	Order no.			Index ¹⁾
		Single wall	Single wall	Double wall	
	Version with operating bellows	Single wall	Single wall	Double wall	
	Set point range in bar	2 to 10	8 to 26	25 to 40	
	Pressure rating	PN 40			
4.1 · 7 · 8	Conversion kit (section A of set point range)	1402-0706	1402-0707	1402-0710	6, 7, 8
3 · 4.1	Conversion kit (section B of set point range)	1402-0711	1402-0711	1402-0712	6, 7, 8
2.1 · 4.2 · 16	Conversion kit (plug) for stainless steel regulators	1402-0872 (process medium in the gas phase)			6
2.1 · 4.2 · 16	Conversion kit (plug) for brass regulators	1402-0925 (process medium in the gas phase) 1402-1831 (liquid phase)			7
4.1	Service kit including 10 seals	1402-1085			All
12	Non-return unit for brass regulators	1402-0705			All
	Non-return unit for stainless steel regulators	1402-0718			
13	Filter	1402-2113 (1x 270x10 ⁻⁶ m mesh size)			All
		1402-2114 (2x 270x10 ⁻⁶ m mesh size · Strainer insert containing non-ferrous metal)			
17	Solder nipple	1402-1053 (2 x Ø28 mm) · 1402-1054 (1 x Ø28 mm) 1400-7091 (1 x Ø18 mm) · 1400-9823 (1 x Ø12 mm)			All
	Welding ends	1402-1055 (3x Ø18x1.6 mm; for version made of brass) 1402-0550 (3x Ø18x1.6 mm; for stainless steel version) 1402-1256 (2x Ø18x1.6 mm; for ports B and C, stainless steel version as excess pressure valve)			All
	Screwed-on flanges for stainless steel version	1402-0595 (2x NPS 1, Class 300) · (2x DN 25, PN 40) on request			All
	Cap for port A	1402-1249			All
	Cap for port C	1400-7297			

¹⁾ See nameplate (entry according to type designation)

Type 2040 Safety Temperature Monitor · ▶ T 2090

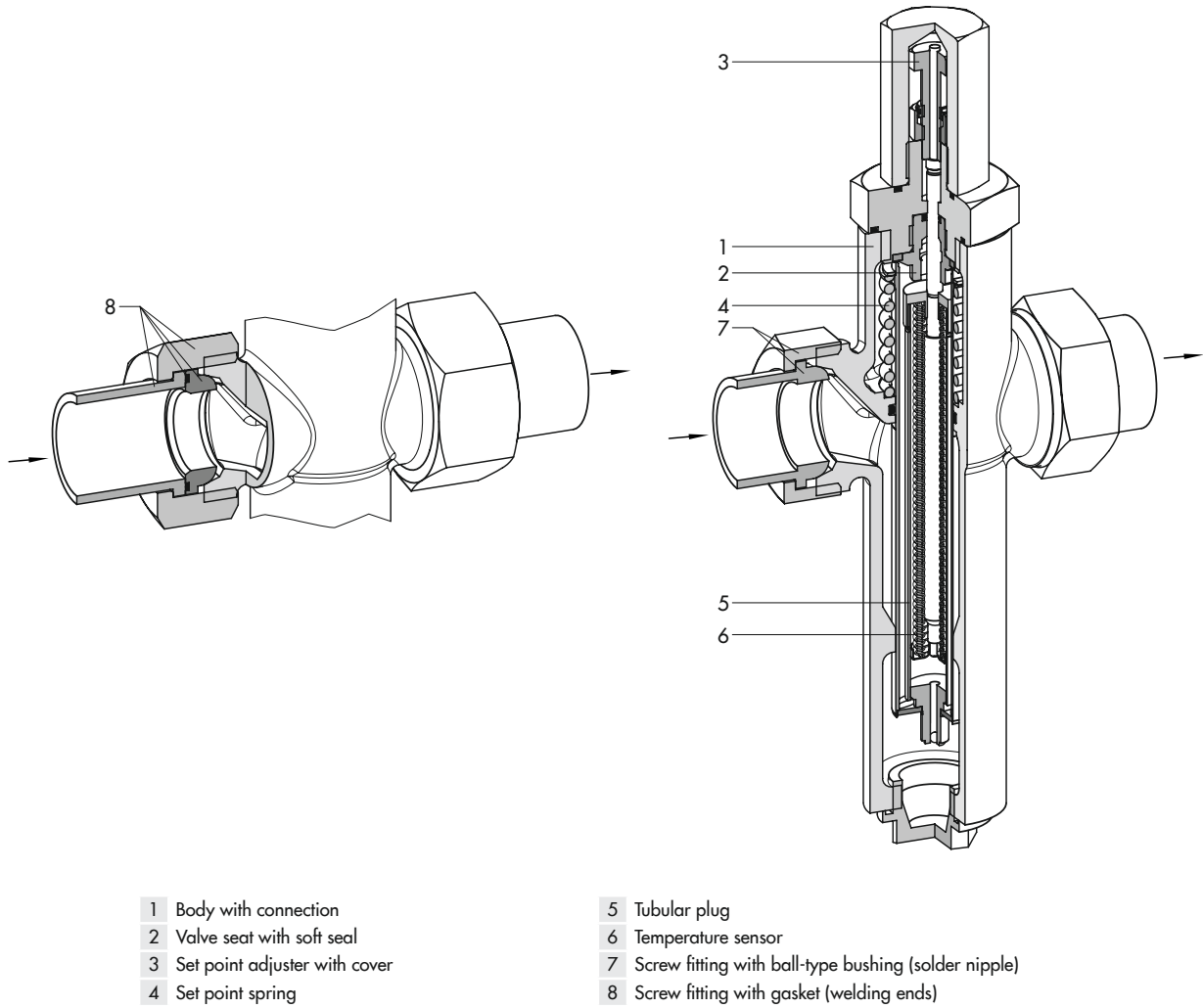


Fig. 7: Type 2040 Safety Temperature Monitor

Table 4: Spare parts and accessories · Type 2040

Position	Spare parts/accessories		Order no.
	Pressure rating		PN 40
7	Screw fitting with ball-type bushing	Solder nipple	Red brass, DN 25 1400-6840
			Brass, DN 15 1400-9182
	Welding ends		Stainless steel, DN 25 1400-9129
			Stainless steel, DN 15 1400-9183
8	Screw fitting with gasket	Solder nipple	Brass, DN 25 1400-9131
			Brass, DN 15 1400-9130
	Welding ends		Stainless steel, DN 25 1400-9181
			Stainless steel, DN 15 1400-9180

