

FACTS | FIGURES | DATA

Pressure reducer V182 · V82

V182 · V82



FRANK
PREMIUM-QUALITY PLASTIC

Pressure reducer V182 · V82

DN 10 to DN 100



V182 PVDF

V182 PP



V182 PVC

USE

The pressure reducer V182/V82 reduces the system pressure to a defined value. Utilising the differential pressure, the pressure reducer sets itself to the set operating pressure. There is no direct relationship between the output pressure and the inlet pressure.

FUNCTION

The output pressure is exerted onto the diaphragm surface through a control bore and counteracts the set spring force. Once balance of pressure has been achieved, the valve closes and keeps the operating pressure constant by doing so. If the pressure decreases at the output side, then the set spring force is greater, and the valve opens until the balance of pressure has once more been achieved.

SPECIAL FEATURES

- All parts that come into contact with the medium are made of highly-resistant plastics
- The counter mechanism is hermetically sealed from the medium
- Good control properties thanks to optimisation of the piston, spring and control surface
- No auxiliary energy required
- Largely maintenance-free and can be installed in any position
- Diaphragm-protected pressure gauge for reading off the output pressure
- Valve adjustment also possible under operating pressure

MATERIALS

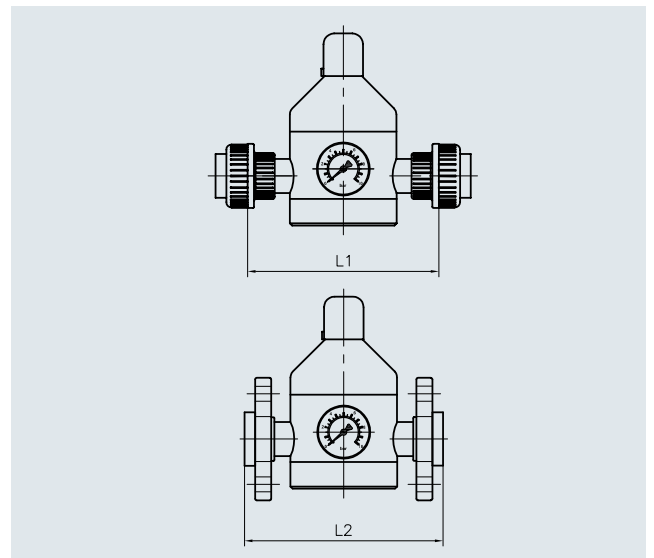
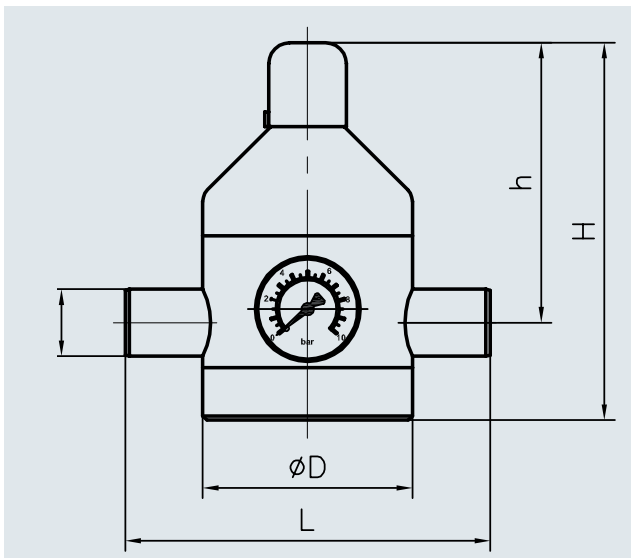
Housing	Permissible operating temperature	Diaphragm / V 82	Seal / V182
PVC-U	0 to +60 °C	EPDM	EPDM
PP	-10 to +80 °C	EPDM/PTFE coated	Viton
PVDF	-20 to +100 °C		

TECHNICAL DATA

Type	Size	PN	Adjustment range in bar
V182	DN 10-50	10	0.5-9
V82	DN 65-80	6	0.5-5
V82	DN 100	4	1-3

DIMENSIONS IN MM (GUIDELINE VALUES)

d	DN	Ø D	H	h	L PVC-U adhesive PP-PVDF fusion spigot	L PVDF- HP, PP Butt fusion spigot WNF/IR	L1	L2
16	10	70	147	112	134	–	154	140
20	15	70	147	112	134	150	154	140
25	20	100	180	130	174	190	185	180
32	25	100	180	130	174	190	185	180
40	32	130	230	175	224	240	248	230
50	40	130	230	175	224	240	252	230
63	50	150	250	210	244	260	280	250
75	65	200	350	250	300	300	–	306
90	75	250	425	305	360	360	–	370
110	100	300	495	345	420	420	–	430

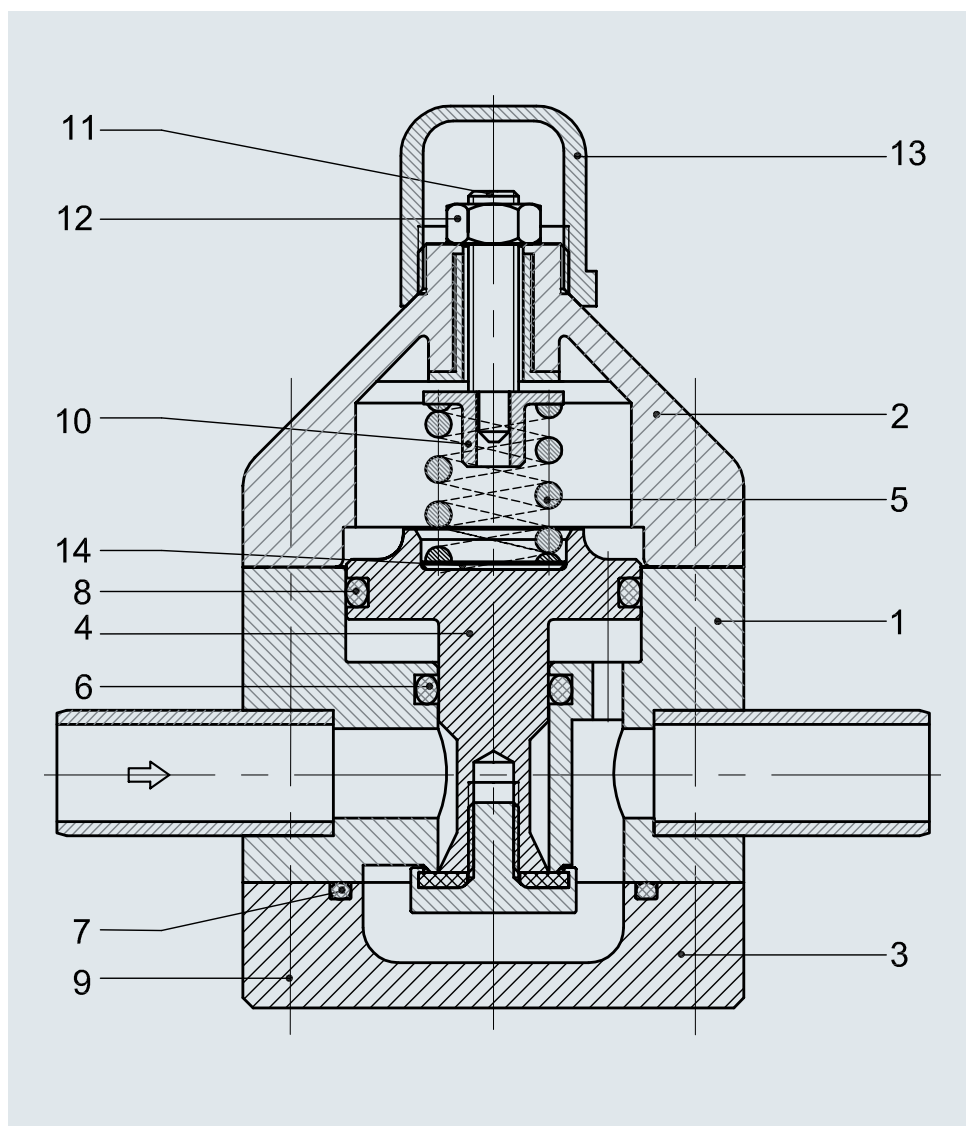


ARTICLE NUMBERS

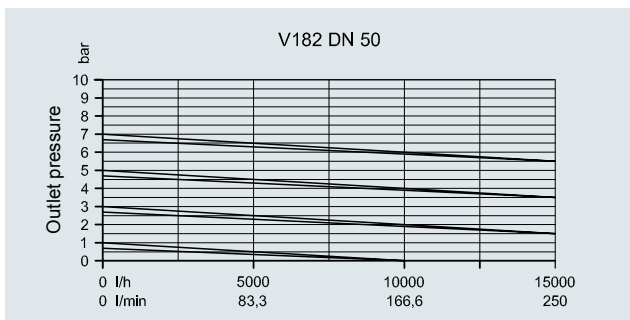
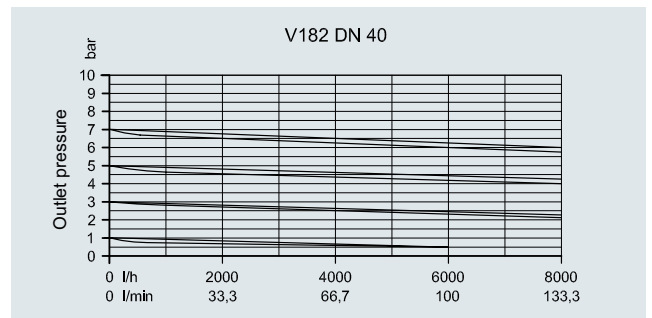
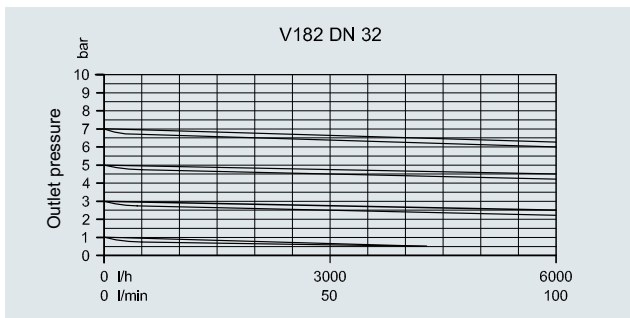
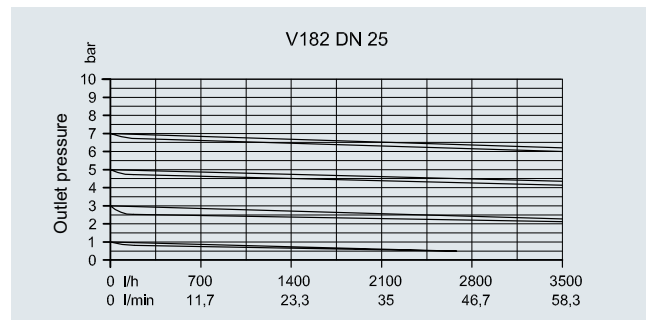
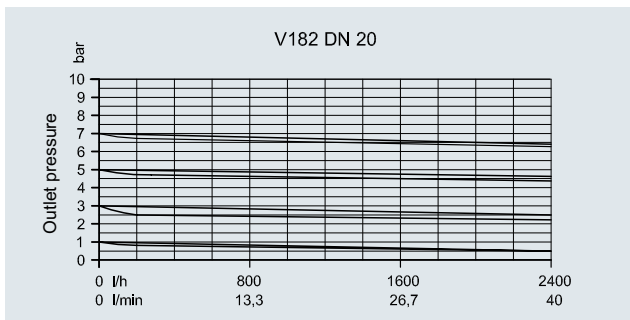
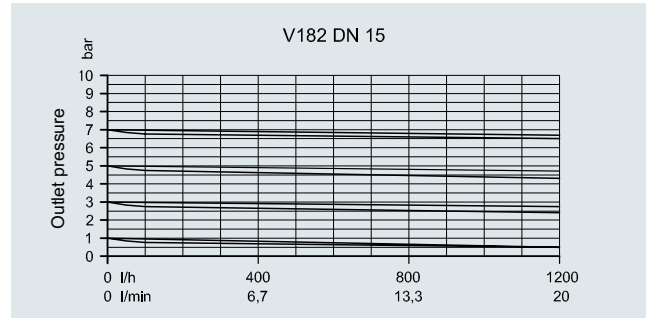
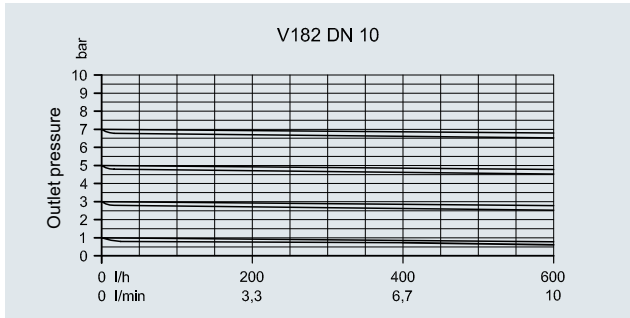
d	DN	Type	PVC/EPDM	PVC/FPM	PP/EPDM	PP/FPM	PP/EPDM IR	PP/FPM IR	PVDF/FPM	PVDF/FPM IR
16	10	V182	17.005.510	17.005.520	17.005.530	17.005.540	17.005.550	17.005.560	17.005.570	17.005.580
20	15	V182	17.005.511	17.005.521	17.005.531	17.005.541	17.005.551	17.005.561	17.005.571	17.005.581
25	20	V182	17.005.512	17.005.522	17.005.532	17.005.542	17.005.552	17.005.562	17.005.572	17.005.582
32	25	V182	17.005.513	17.005.523	17.005.533	17.005.543	17.005.553	17.005.563	17.005.573	17.005.583
40	32	V182	17.005.514	17.005.524	17.005.534	17.005.544	17.005.554	17.005.564	17.005.574	17.005.584
50	40	V182	17.005.515	17.005.525	17.005.535	17.005.545	17.005.555	17.005.565	17.005.575	17.005.585
63	50	V182	17.005.516	17.006.286	17.006.287	17.006.288	17.006.302	17.006.303	17.005.576	17.006.304
Diaphragm			EPDM	PTFE	EPDM	PTFE	EPDM	PTFE	PTFE	PTFE
75	65	V82	17.002.509	17.002.511	17.002.609	17.002.611	17.005.557	17.005.567	17.003.559	17.005.587
90	80	V82	17.002.513	17.002.515	17.002.613	17.002.615	17.005.558	17.005.568	–	–
110	100	V82	17.002.517	17.002.519	17.002.617	17.002.619	17.005.559	17.005.569	–	–

INDIVIDUAL PARTS

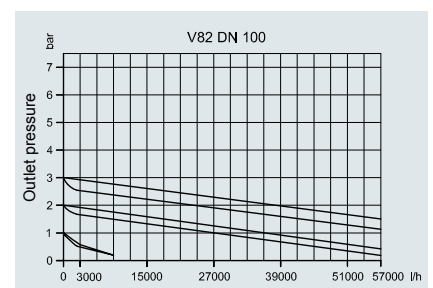
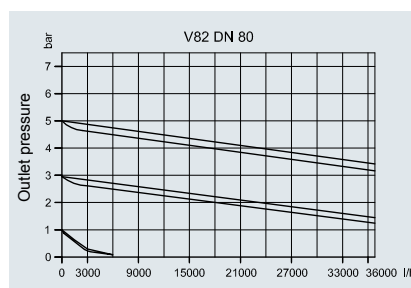
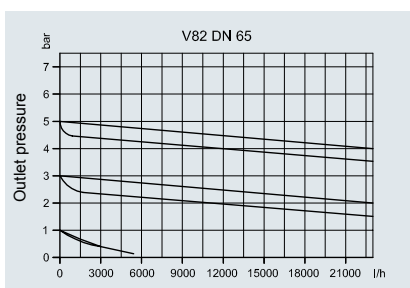
- Pos. Designation
- 1 Valve body assembly
 - 2 Valve upper body assembly
 - 3 Valve lower body
 - 4 Piston assembly
 - 5 Compression spring
 - 6 Piston O-ring (bottom)
 - 7 O-ring (bottom)
 - 8 Piston O-ring (top)
 - 9 Housing screws
 - 10 Spring plate
 - 11 Adjustment screw
 - 12 Lock nut
 - 13 Cap
 - 14 Spring support plate



CHARACTERISTIC GRAPHS V 182



CHARACTERISTIC GRAPHS V 82

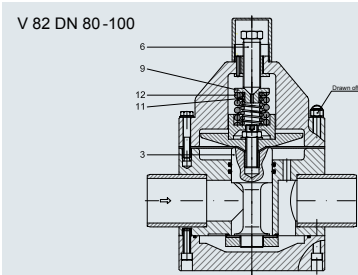
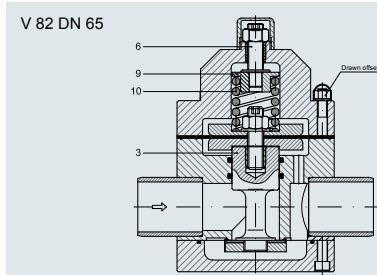
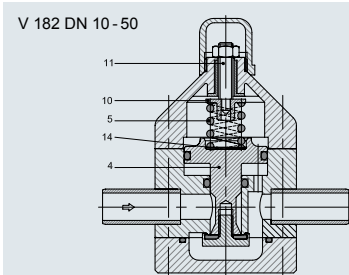


The characteristic curves on the graphs show the decrease in the set outlet pressure from 0 through to the maximum permissible flow rate. The upper and lower lines plot the course of the opening and closing pressure respectively. All characteristic curves apply to water at a temperature of 20 °C.

SPARE PART REGULATOR SET FOR V182 / V82 PVC-U / PP / PVDF

Set consisting of:	Type	DN	PVC/EPDM Article No.	PVC/FPM Article No.	PP/EPDM Article No.	PP/FPM Article No.	PVDF/FPM Article No.
Pos. 4 piston	V 182	10/15	17.006.010	17.006.109	17.006.126	17.006.133	17.006.182
Pos. 5 compression spring	V 182	20/25	17.006.011	17.006.110	17.006.127	17.006.134	17.006.183
Pos. 10 spring plate	V 182	32/40	17.006.012	17.006.111	17.006.128	17.006.135	17.006.184
Pos. 11 adjustment screw	V 182	50	17.006.295	17.006.296	17.006.297	17.006.298	17.006.299
Pos. 14 pressure disc							

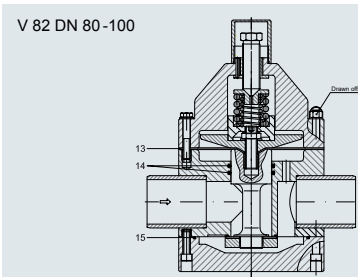
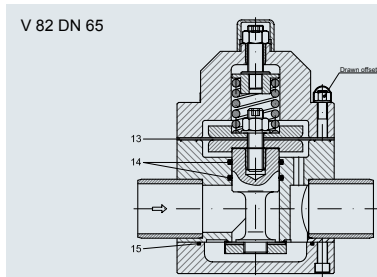
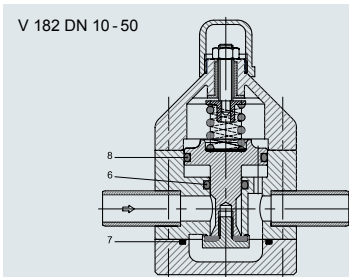
Set consisting of:	Type	DN	PVC/EPDM Article No.	PVC/PTFE Article No.	PP/EPDM Article No.	PP/PTFE Article No.	PVDF/FPM Article No.
Pos. 3 piston	V 82	65	17.006.106	17.006.113	17.006.130	17.006.137	17.006.186
Pos. 6 adjustment screw	V 82	80	17.006.107	17.006.114	17.006.131	17.006.138	–
Pos. 9 spring plate	V 82	100	17.006.108	17.006.115	17.006.132	17.006.139	–
Pos. 10-12 compression springs							



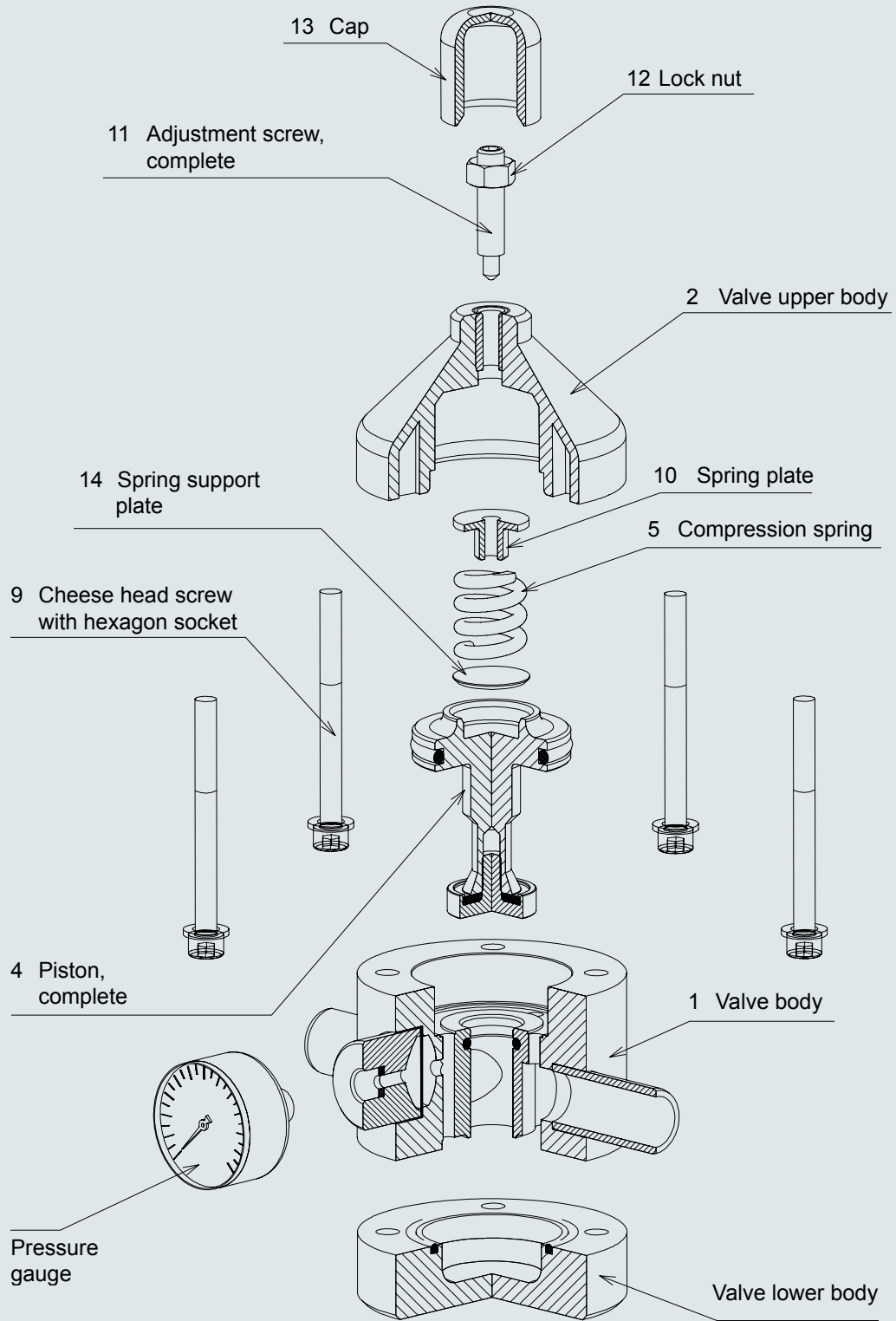
SPARE PART SEAL SET FOR V182 / V82 PVC-U / PP / PVDF

Set consisting of:	Type	DN	PVC/EPDM Article No.	PVC/FPM Article No.	PP/EPDM Article No.	PP/FPM Article No.	PVDF/FPM Article No.
Pos. 6 valve body O-ring	V 182	10/15	17.006.014	17.006.119	17.006.014	17.006.119	17.006.119
Pos. 7 O-ring (bottom)	V 182	20/25	17.006.015	17.006.120	17.006.015	17.006.120	17.006.120
Pos. 8 piston O-ring	V 182	32/40	17.006.016	17.006.121	17.006.016	17.006.121	17.006.121
	V 182	50	17.006.300	17.006.301	17.006.300	17.006.301	17.006.301

Set consisting of:	Type	DN	PVC/EPDM Article No.	PVC/PTFE Article No.	PP/EPDM Article No.	PP/PTFE Article No.	PVDF/FPM Article No.
Pos. 13 diaphragm	V 82	65	17.006.116	17.006.123	17.006.116	17.006.123	17.006.123
Pos. 14 valve body O-ring	V 82	80	17.006.117	17.006.124	17.006.117	17.006.124	–
Pos. 15 O-ring (bottom)	V 82	100	17.006.118	17.006.125	17.006.118	17.006.125	–



PRESSURE REDUCER V182



V182.V82



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