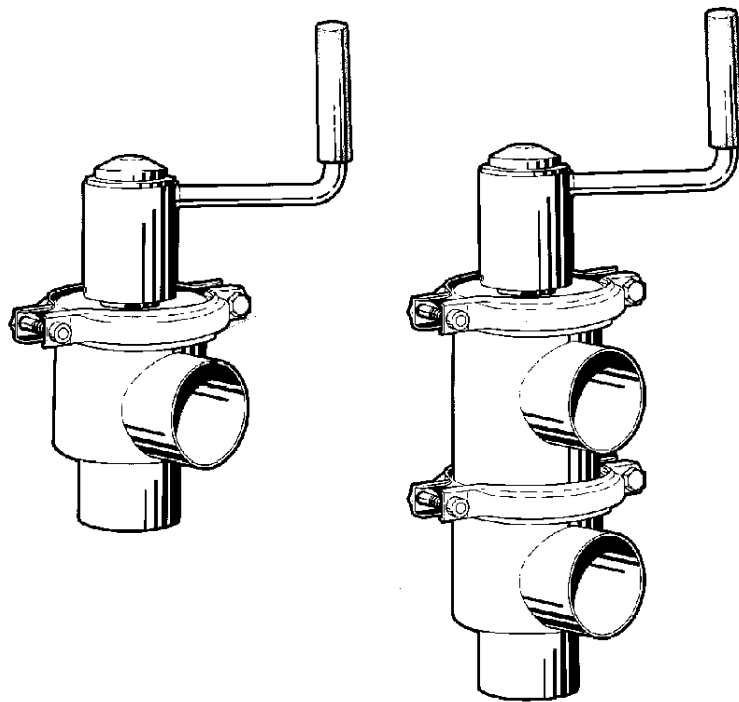


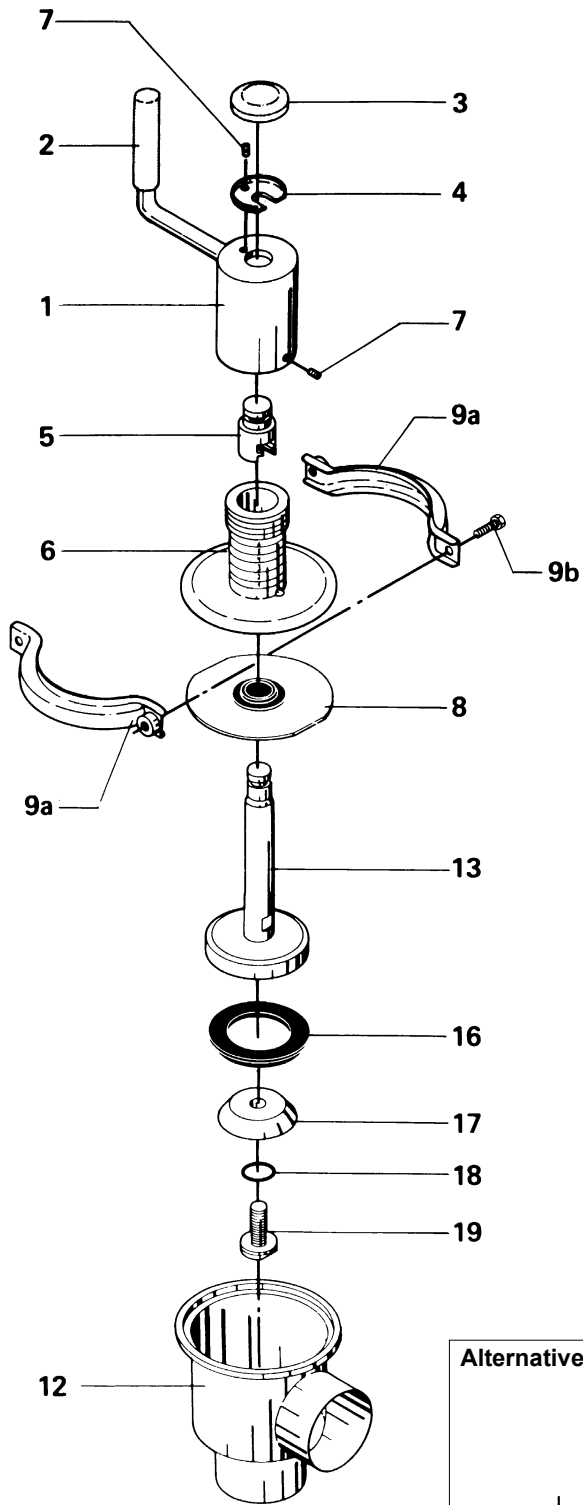
Spare Parts

SMO Sanitary Manual Valve

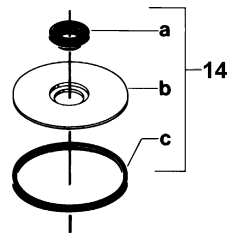


Stop Valve Type SMO

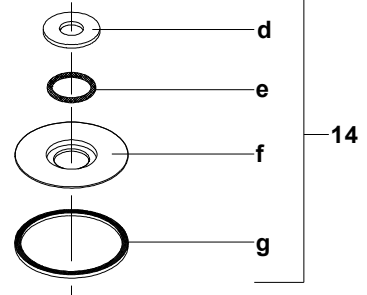
2



Alternatives Stem seal



Parts for FEP seal



Stop Valve Type SMO

OPERATING MECHANISM

Pos.	Qty	Denomination	DN40	DN50	DN65	76 mm	DN80	DN 100
			38 mm	51 mm	63.5 mm			101.6 mm
	1	Crank mechanism complete ...	31353-0530-1	31353-0530-1	31353-0530-1	31353-0530-2	31353-0530-2	31353-0530-2
1	1	Crank	31353-0462-1	31353-0462-1	31353-0462-1	31353-0462-1	31353-0462-1	31353-0462-1
2	1	Handle (Included in pos. 1)	31353-0495-1	31353-0495-1	31353-0495-1	31353-0495-1	31353-0495-1	31353-0495-1
3	1	Cap	31353-0468-1	31353-0468-1	31353-0468-1	31353-0468-1	31353-0468-1	31353-0468-1
4	1	Washer	31353-0467-1	31353-0467-1	31353-0467-1	31353-0467-1	31353-0467-1	31353-0467-1
5	1	Stem holder	31353-0466-1	31353-0466-1	31353-0466-1	31353-0466-1	31353-0466-1	31353-0466-1
6	1	Guide	31353-0459-1	31353-0459-1	31353-0459-1	31353-0460-1	31353-0460-1	31353-0460-1
7	2	Set screw	221581-92	221581-92	221581-92	221581-92	221581-92	221581-92

Valve Body Part

Pos.	Qty	Denomination	DN40	DN50	DN65	76 mm	DN80	DN 100
			38 mm	51 mm	63.5 mm			101.6 mm

Stem Seal

8Δ	1	Lip seal, EPDM	31353-0155-1	31353-0155-1	31353-0155-1	31353-0188-1	31353-0188-1	31353-0188-1
	1	Lip seal, NBR	31353-0155-2	31353-0155-2	31353-0155-2	31353-0188-2	31353-0188-2	31353-0188-2
	1	Lip seal, FPM	31353-0155-3	31353-0155-3	31353-0155-3	31353-0188-3	31353-0188-3	31353-0188-3

Clamp

9a+b	1	Clamps and screws	31320-0027-1	31320-0027-1	31320-0027-1	31320-0027-2	31320-0027-2	31320-0027-2
		(Period 9209-)						
9a	2	Clamp half (Period -9209)	31320-0022-1	31320-0022-1	31320-0022-1	31320-0021-1	31320-0021-1	31320-0021-1
9b	2	Screw (Period -9209)	2210936-18	2210936-18	2210936-18	2210936-18	2210936-18	2210936-18

Valve Body

12	1	Valve body, 2 ports ISO	31353-0375-1	31353-0376-1	31353-0380-1	31353-0381-1		31353-0026-1
	1	Valve body, 2 ports DN	9612-0940-01	9612-0941-01	9612-0942-01		9612-0943-01	9612-0944-01
	1	Valve body, 3 ports ISO	31353-0375-6	31353-0376-6	31353-0380-6	31353-0381-6		31353-0026-6
	1	Valve body, 3 ports DN	9612-0940-02	9612-0941-02	9612-0942-02		9612-0943-02	9612-0944-02

Valve Plug

	1	Plug, single, complete EPDM ..	31353-0330-1	31353-0331-1	31353-0332-1	31353-0333-1	31353-0333-4	31353-0334-1
	1	Plug, single, complete NBR	31353-0330-2	31353-0331-2	31353-0332-2	31353-0333-2	31353-0333-5	31353-0334-2
	1	Plug, single, complete FPM	31353-0330-3	31353-0331-3	31353-0332-3	31353-0333-3	31353-0333-6	31353-0334-3
13	1	Stem	31353-0340-1	31353-0377-1	31353-0378-1	31353-0341-1	31353-0341-2	31353-0379-1
16Δ●	1	Packing, EPDM	31353-0320-1	31353-0321-1	31353-0322-1	31353-0324-1	9612-0950-01	31353-0325-1
	1	Packing, NBR	31353-0320-2	31353-0321-2	31353-0322-2	31353-0324-2	9612-0950-02	31353-0325-2
	1	Packing, FPM	31353-0320-3	31353-0321-3	31353-0322-3	31353-0324-3	9612-0950-03	31353-0325-3
	1	Packing, PTFE	31353-1211-1	31353-1212-1	31353-1213-1	31353-1214-1	31353-1225-1	31353-1215-1
17	1	Washer	31353-0357-1	31353-0358-1	31353-0359-1	31353-0360-1	31353-0360-2	31353-0361-1
18Δ●	1	O-ring, EPDM	990034-01	990034-01	990034-01	990034-01	990034-01	990034-01
	1	O-ring, NBR	223404-21	223404-21	223404-21	223404-21	223404-21	223404-21
	1	O-ring, FPM	223404-35	223404-35	223404-35	223404-35	223404-35	223404-35
	1	Seal-ring, PTFE	9612-4330-1	9612-4330-1	9612-4330-1	9612-4330-1	9612-4330-1	9612-4330-1
19	1	Screw	31353-0362-1	31353-0362-1	31353-0362-1	31353-0362-1	31353-0362-1	31353-0362-1

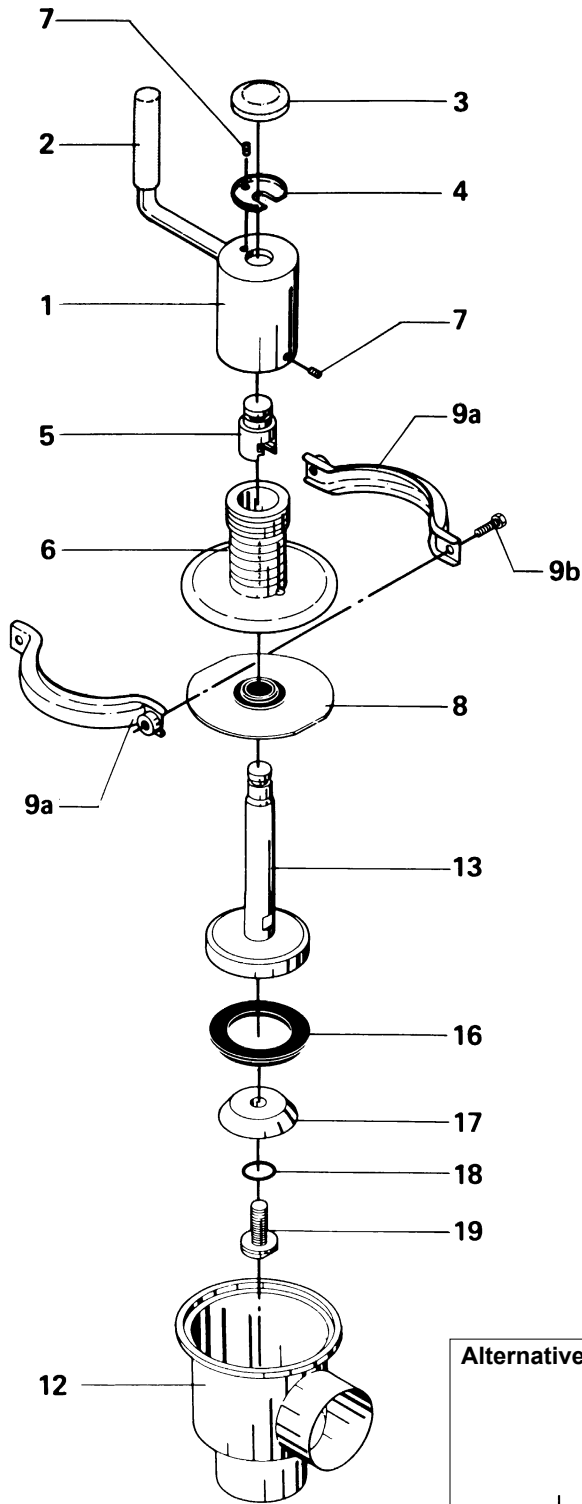
Δ		Service Kit EPDM	9611-92-0010	9611-92-0013	9611-92-0016	9611-92-0019	9611-92-0105	9611-92-0022
Δ		Service Kit NBR	9611-92-0011	9611-92-0014	9611-92-0017	9611-92-0020	9611-92-0106	9611-92-0023
Δ		Service Kit FPM	9611-92-0012	9611-92-0015	9611-92-0018	9611-92-0021	9611-92-0107	9611-92-0024

Parts marked with Δ are included in the **service kits**.

Recommended spare parts: Pos. 3,7 and **Service Kit**.

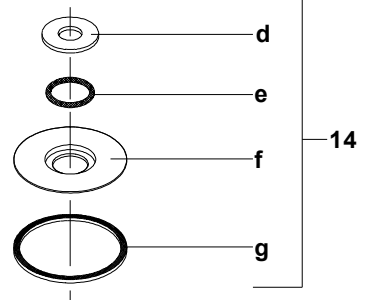
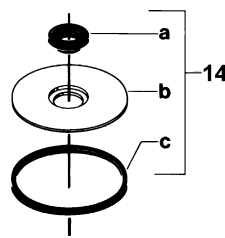
Stop Valve Type SMO

(Same drawing as on page 2)



Alternatives Stem seal

Parts for FEP seal

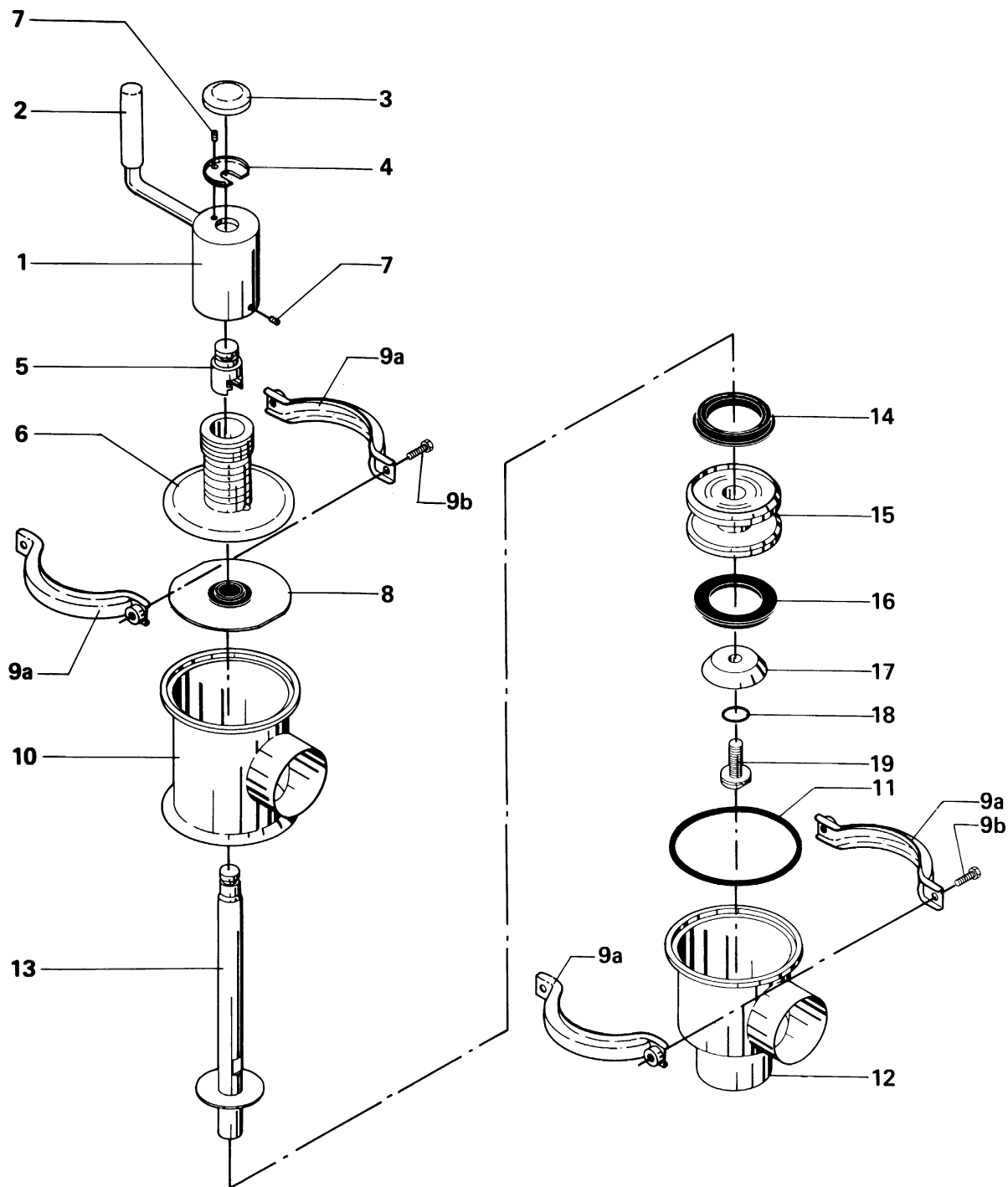


Stop Valve Type SMO

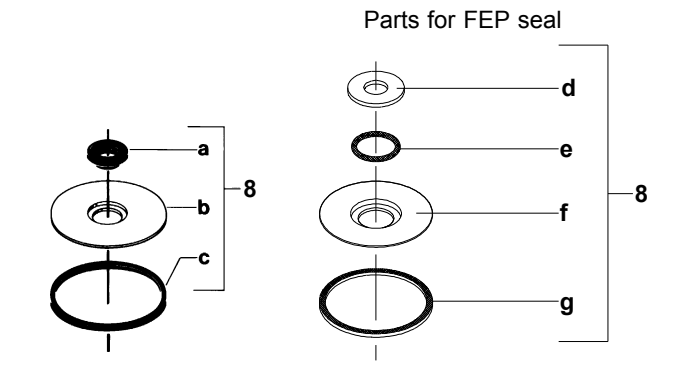
Pos.	Qty	Denomination	DN40 38 mm	DN50 51 mm	DN65 63.5 mm	76 mm	DN80	DN 100 101.6 mm
Valve Body with 0.8 RA finish inside								
12	1	Valve body, 2 ports ISO	31353-0375-2	31353-0376-2	31353-0380-2	31353-0381-2		31353-0026-2
	1	Valve body, 2 ports DN	9612-0940-03	9612-0941-03	9612-0942-03		9612-0943-03	9612-0944-03
	1	Valve body, 3 ports ISO	31353-0375-3	31353-0376-3	31353-0380-3	31353-0381-3		31353-0026-3
	1	Valve body, 3 ports DN	9612-0940-04	9612-0941-04	9612-0942-04		9612-0943-04	9612-0944-04
Valve Plug with 0.8 RA finish								
	1	Plug, single, complete EPDM	31353-1090-1	31353-1091-1	31353-1092-1	31353-1093-1	31353-1093-4	31353-1094-1
	1	Plug, single, complete NBR ..	31353-1090-2	31353-1091-2	31353-1092-2	31353-1093-2	31353-1093-5	31353-1094-2
	1	Plug, single, complete FPM ..	31353-1090-3	31353-1091-3	31353-1092-3	31353-1093-3	31353-1093-6	31353-1094-3
13	1	Stem	31353-1007-1	31353-1007-2	31353-1007-3	31353-1007-4	31353-1007-8	31353-1007-5
17	1	Washer	31353-1010-1	31353-1010-2	31353-1010-3	31353-1010-4	31353-1010-6	31353-1010-5
19	1	Screw	31353-1011-1	31353-1011-1	31353-1011-1	31353-1011-1	31353-1011-1	31353-1011-1
Alternatives								
Stem seal								
14	1	Lip seal kit, EPDM	9611-92-0078	9611-92-0078	9611-92-0078	9611-92-0142	9611-92-0142	9611-92-0142
		(standard)						
	1	Lip seal kit, NBR	9611-92-0079	9611-92-0079	9611-92-0079	9611-92-0143	9611-92-0143	9611-92-0143
	1	Lip seal kit, FPM	9611-92-0080	9611-92-0080	9611-92-0080	9611-92-0144	9611-92-0144	9611-92-0144
a●	1	Lip seal, EPDM	9612-2806-01	9612-2806-01	9612-2806-01	9612-3088-01	9612-3088-01	9612-3088-01
	1	Lip seal, NBR	9612-2806-02	9612-2806-02	9612-2806-02	9612-3088-02	9612-3088-02	9612-3088-02
	1	Lip seal, FPM	9612-2806-03	9612-2806-03	9612-2806-03	9612-3088-03	9612-3088-03	9612-3088-03
b	1	Plate	9612-2805-01	9612-2805-01	9612-2805-01	9612-3087-01	9612-3087-01	9612-3087-01
c●	1	Seal ring, EPDM	31353-0128-1	31353-0128-1	31353-0128-1	31353-0205-1	31353-0205-1	31353-0205-1
	1	Seal ring, NBR	31353-0128-2	31353-0128-2	31353-0128-2	31353-0205-2	31353-0205-2	31353-0205-2
	1	Seal ring, FPM	31353-0128-3	31353-0128-3	31353-0128-3	31353-0205-3	31353-0205-3	31353-0205-3
Stem seal								
14d	1	Washer	31353-0452-1	31353-0452-1	31353-0452-1	31353-0452-2	31353-0452-2	31353-0452-2
e●	1	O-ring FEP/Silicone	9611-99-2909	9611-99-2909	9611-99-2909	9611-99-2910	9611-99-2910	9611-99-2910
f	1	Holder	31353-0453-1	31353-0453-1	31353-0453-1	31353-0454-1	31353-0454-1	31353-0454-1
g●	1	Valve body packing	31353-0451-1	31353-0451-1	31353-0451-1	31353-0451-2	31353-0451-2	31353-0451-2
Service kits special lip seals (marked ●)								
●		Service kit EPDM	9611-92-0447	9611-92-0451	9611-92-0455	9611-92-0459	9611-92-0463	9611-92-0467
●		Service kit NBR	9611-92-0448	9611-92-0452	9611-92-0456	9611-92-0460	9611-92-0464	9611-92-0468
●		Service kit FPM	9611-92-0449	9611-92-0453	9611-92-0457	9611-92-0461	9611-92-0465	9611-92-0469
●		Service kit FEP	9611-92-0450	9611-92-0454	9611-92-0458	9611-92-0462	9611-92-0466	9611-92-0470

Change-over Valve Type SMO

6



Alternatives Stem seal



Change-over Valve Type SMO

OPERATING MECHANISM

Pos.	Qty	Denomination	DN40 38 mm	DN50 51 mm	DN65 63.5 mm	76 mm	DN80	DN100 101.6 mm
	1	Crank mechanism complete	31353-0530-1	31353-0530-1	31353-0530-1	31353-0530-2	31353-0530-2	31353-0530-2
1	1	Crank	31353-0462-1	31353-0462-1	31353-0462-1	31353-0462-1	31353-0462-1	31353-0462-1
2	1	Handle (Included in pos. 1)	31353-0495-1	31353-0495-1	31353-0495-1	31353-0495-1	31353-0495-1	31353-0495-1
3	1	Cap	31353-0468-1	31353-0468-1	31353-0468-1	31353-0468-1	31353-0468-1	31353-0468-1
4	1	Washer	31353-0467-1	31353-0467-1	31353-0467-1	31353-0467-1	31353-0467-1	31353-0467-1
5	1	Stem holder	31353-0466-1	31353-0466-1	31353-0466-1	31353-0466-1	31353-0466-1	31353-0466-1
6	1	Guide	31353-0459-1	31353-0459-1	31353-0459-1	31353-0460-1	31353-0460-1	31353-0460-1
7	2	Set screw	221581-92	221581-92	221581-92	221581-92	221581-92	221581-92

Valve Body Part

Pos.	Qty	Denomination	DN40 38 mm	DN50 51 mm	DN65 63.5 mm	76 mm	DN80	DN100 101.6 mm
Stem Seal								
8Δ	1	Lipseal, EPDM	31353-0155-1	31353-0155-1	31353-0155-1	31353-0188-1	31353-0188-1	31353-0188-1
	1	Lip seal, NBR	31353-0155-2	31353-0155-2	31353-0155-2	31353-0188-2	31353-0188-2	31353-0188-2
	1	Lipseal, FPM	31353-0155-3	31353-0155-3	31353-0155-3	31353-0188-3	31353-0188-3	31353-0188-3
Clamp								
9a+b	2	Clamps and screws	31320-0027-1	31320-0027-1	31320-0027-1	31320-0027-2	31320-0027-2	31320-0027-2
		(Period 9209-)						
9a	4	Clamp half (Period -9209)	31320-0022-1	31320-0022-1	31320-0022-1	31320-0021-1	31320-0021-1	31320-0021-1
9b	4	Screw (Period -9209)	2210936-18	2210936-18	2210936-18	2210936-18	2210936-18	2210936-18

Valve Body

10	1	Valve body, upper, 1 port ISO ...	31353-0053-1	31353-0054-1	31353-0055-1	31353-0056-1		31353-0058-1
	1	Valve body, upper, 1 port DN	9612-0945-01	9612-0946-01	9612-0947-01		9612-0948-01	9612-0949-01
	1	Valve body, upper, 2 ports ISO ..	31353-0053-6	31353-0054-6	31353-0055-6	31353-0056-6		31353-0058-6
	1	Valve body, upper, 2 ports DN ..	9612-0945-02	9612-0946-02	9612-0947-02		9612-0948-02	9612-0949-02
11Δ●	1	Valve body packing, EPDM	31353-0128-1	31353-0128-1	31353-0128-1	31353-0205-1	31353-0205-1	31353-0205-1
	1	Valve body packing, NBR	31353-0128-2	31353-0128-2	31353-0128-2	31353-0205-2	31353-0205-2	31353-0205-2
	1	Valve body packing, FPM	31353-0128-3	31353-0128-3	31353-0128-3	31353-0205-3	31353-0205-3	31353-0205-3
	1	Valve body packing, PTFE	31353-0451-1	31353-0451-1	31353-0451-1	31353-0451-2	31353-0451-2	31353-0451-2
12	1	Valve body, lower, 2 ports ISO ..	31353-0375-1	31353-0376-1	31353-0380-1	31353-0381-1		31353-0026-1
	1	Valve body, lower, 2 ports DN ..	9612-0940-01	9612-0941-01	9612-0942-01		9612-0943-01	9612-0944-01
	1	Valve body, lower, 3 ports ISO ..	31353-0375-6	31353-0376-6	31353-0380-6	31353-0381-6		31353-0026-6
	1	Valve body, lower, 3 ports DN ..	9612-0940-02	9612-0941-02	9612-0942-02		9612-0943-02	9612-0944-02

Valve Plug

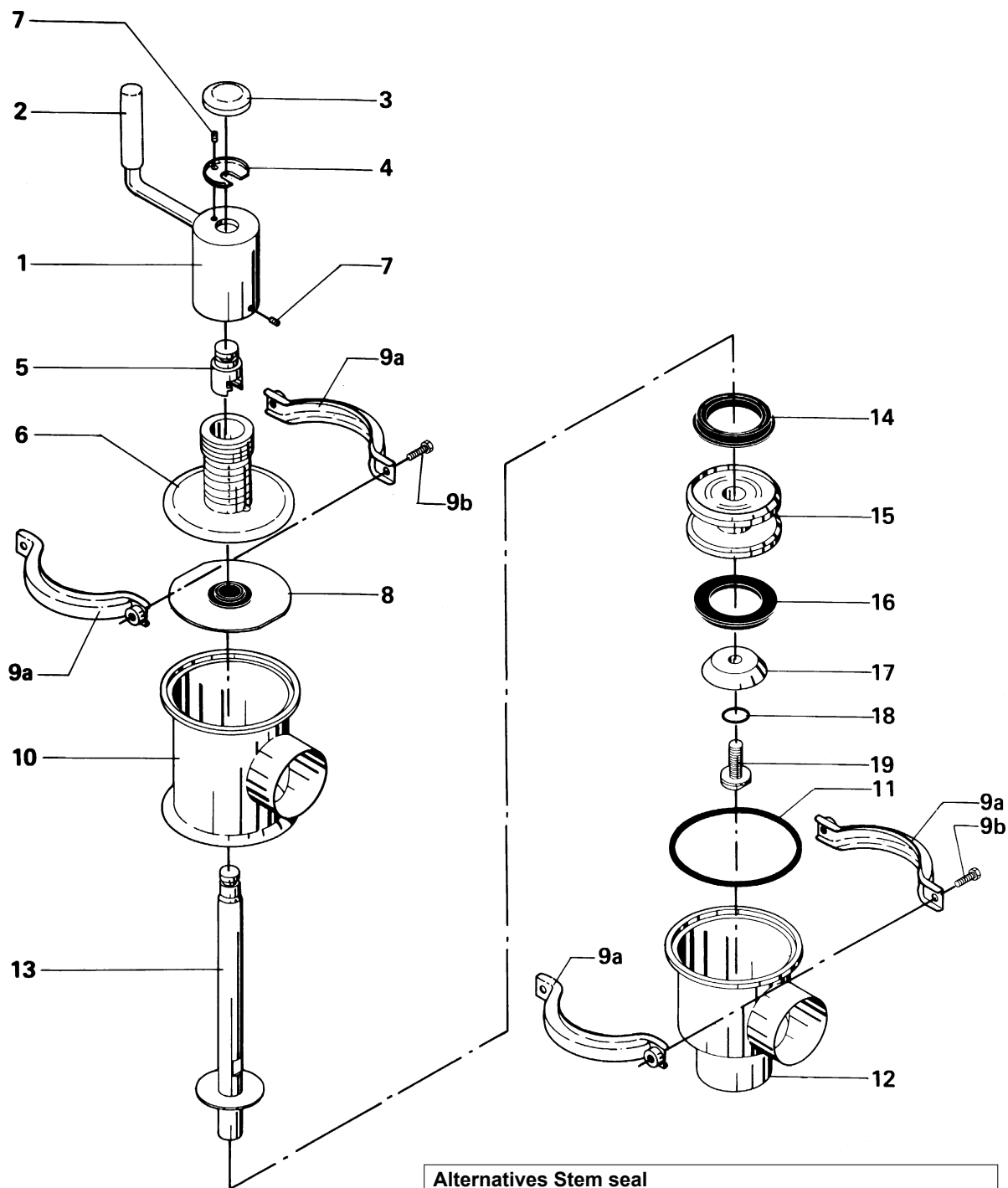
	1	Plug, double, complete EPDM	31353-0335-1	31353-0336-1	31353-0337-1	31353-0338-1	31353-0338-4	31353-0339-1
	1	Plug, double, complete NBR	31353-0335-2	31353-0336-2	31353-0337-2	31353-0338-2	31353-0338-5	31353-0339-2
	1	Plug, double, complete FPM	31353-0335-3	31353-0336-3	31353-0337-3	31353-0338-3	31353-0338-6	31353-0339-3
13	1	Stem	31353-0349-1	31353-0349-2	31353-0349-3	31353-0350-1	31353-0350-3	31353-0350-2
14Δ●	1	Packing, upper, EPDM	31353-0321-1	31353-0321-1	31353-0323-1	31353-0324-1	31353-0324-1	31353-0325-1
	1	Packing, upper, NBR	31353-0321-2	31353-0321-2	31353-0323-2	31353-0324-2	31353-0324-2	31353-0325-2
	1	Packing, upper, FPM	31353-0321-3	31353-0321-3	31353-0323-3	31353-0324-3	31353-0324-3	31353-0325-3
	1	Packing, upper, PTFE	31353-1212-1	31353-1212-1	31353-1216-1	31353-1214-1	31353-1214-1	31353-1215-1
15	1	Middle piece	31353-0363-1	31353-0364-1	31353-0365-1	31353-0366-1	9612-0984-01	31353-0367-1
16Δ●	1	Packing, lower, EPDM	31353-0320-1	31353-0321-1	31353-0322-1	31353-0324-1	9612-0950-01	31353-0325-1
	1	Packing, lower, NBR	31353-0320-2	31353-0321-2	31353-0322-2	31353-0324-2	9612-0950-02	31353-0325-2
	1	Packing, lower, FPM	31353-0320-3	31353-0321-3	31353-0322-3	31353-0324-3	9612-0950-03	31353-0325-3
	1	Packing, lower, PTFE	31353-1211-1	31353-1212-1	31353-1213-1	31353-1214-1	31353-1225-1	31353-1215-1
17	1	Washer	31353-0357-1	31353-0358-1	31353-0359-1	31353-0360-1	31353-0360-2	31353-0361-1
18Δ●	1	O-ring, EPDM	990034-01	990034-01	990034-01	990034-01	990034-01	990034-01
	1	O-ring, NBR	223404-21	223404-21	223404-21	223404-21	223404-21	223404-21
	1	O-ring, FPM	223404-35	223404-35	223404-35	223404-35	223404-35	223404-35
	1	Seal-ring, PTFE	9612-4330-01	9612-4330-01	9612-4330-01	9612-4330-01	9612-4330-01	9612-4330-01
19	1	Screw	31353-0362-1	31353-0362-1	31353-0362-1	31353-0362-1	31353-0362-1	31353-0362-1

Recommended spare parts: Pos. 3,7 and **Service Kit**.

Change-over Valve Type SMO

(Same drawing as on page 6)

8



Change-over Valve Type SMO

Pos.	Qty	Denomination	DN40 38 mm	DN50 51 mm	DN65 63.5 mm	76 mm	DN80	DN100 101.6 mm
Valve Body with 0.8 RA finish inside								
10	1	Valve body, upper, 1 port ISO ...	31353-0053-2	31353-0054-2	31353-0055-2	31353-0056-2		31353-0058-2
	1	Valve body, upper, 1 port DN	9612-0945-03	9612-0946-03	9612-0947-03		9612-0948-03	9612-0949-03
	1	Valve body, upper, 2 ports ISO .	31353-0053-3	31353-0054-3	31353-0055-3	31353-0056-3		31353-0058-3
	1	Valve body, upper, 2 ports DN ..	9612-0945-04	9612-0946-04	9612-0947-04		9612-0948-04	9612-0949-04
12	1	Valve body, lower, 2 ports ISO .	31353-0375-2	31353-0376-2	31353-0380-2	31353-0381-2		31353-0026-2
	1	Valve body, lower, 2 ports DN ..	9612-0940-03	9612-0941-03	9612-0942-03		9612-0943-03	9612-0944-03
	1	Valve body, lower, 3 ports ISO .	31353-0375-3	31353-0376-3	31353-0380-3	31353-0381-3		31353-0026-3
	1	Valve body, lower, 3 ports DN ..	9612-0940-04	9612-0941-04	9612-0942-04		9612-0943-04	9612-0944-04
Valve Plug with 0.8 RA finish								
	1	Plug, double, complete EPDM	31353-1095-1	31353-1096-1	31353-1097-1	31353-1098-1	31353-1098-4	31353-1099-1
	1	Plug, double, complete NBR	31353-1095-2	31353-1096-2	31353-1097-2	31353-1098-2	31353-1098-5	31353-1099-2
	1	Plug, double, complete FPM	31353-1095-3	31353-1096-3	31353-1097-3	31353-1098-3	31353-1098-6	31353-1099-3
13	1	Stem	31353-1008-1	31353-1008-2	31353-1008-3	31353-1008-4	31353-1008-8	31353-1008-5
15	1	Middle piece	31353-1009-1	31353-1009-2	31353-1009-3	31353-1009-4	31353-1009-6	31353-1009-5
17	1	Washer	31353-1010-1	31353-1010-2	31353-1010-3	31353-1010-4	31353-1010-6	31353-1010-5
19	1	Screw	31353-1011-1	31353-1011-1	31353-1011-1	31353-1011-1	31353-1011-1	31353-1011-1
Δ		Service Kit EPDM	9611-92-0025	9611-92-0028	9611-92-0031	9611-92-0034	9611-92-0108	9611-92-0037
Δ		Service Kit NBR	9611-92-0026	9611-92-0029	9611-92-0032	9611-92-0035	9611-92-0109	9611-92-0038
Δ		Service Kit FPM	9611-92-0027	9611-92-0030	9611-92-0033	9611-92-0036	9611-92-0110	9611-92-0039

Parts marked with Δ are included in the **service kits**.

Alternatives

Stem seal

14	1	Lip seal kit, EPDM (standard)	9611-92-0078	9611-92-0078	9611-92-0078	9611-92-0142	9611-92-0142	9611-92-0142
	1	Lip seal kit, NBR	9611-92-0079	9611-92-0079	9611-92-0079	9611-92-0143	9611-92-0143	9611-92-0143
	1	Lip seal kit, FPM	9611-92-0080	9611-92-0080	9611-92-0080	9611-92-0144	9611-92-0144	9611-92-0144
a●	1	Lip seal, EPDM	9612-2806-01	9612-2806-01	9612-2806-01	9612-3088-01	9612-3088-01	9612-3088-01
	1	Lip seal, NBR	9612-2806-02	9612-2806-02	9612-2806-02	9612-3088-02	9612-3088-02	9612-3088-02
	1	Lip seal, FPM	9612-2806-03	9612-2806-03	9612-2806-03	9612-3088-03	9612-3088-03	9612-3088-03
b	1	Plate	9612-2805-01	9612-2805-01	9612-2805-01	9612-3087-01	9612-3087-01	9612-3087-01
c●	1	Sealring, EPDM	31353-0128-1	31353-0128-1	31353-0128-1	31353-0205-1	31353-0205-1	31353-0205-1
	1	Seal ring, NBR	31353-0128-2	31353-0128-2	31353-0128-2	31353-0205-2	31353-0205-2	31353-0205-2
	1	Sealring, FPM	31353-0128-3	31353-0128-3	31353-0128-3	31353-0205-3	31353-0205-3	31353-0205-3
Stem seal								
14d	1	Washer	31353-0452-1	31353-0452-1	31353-0452-1	31353-0452-2	31353-0452-2	31353-0452-2
e●	1	O-ring FEP/Silicone	9611-99-2909	9611-99-2909	9611-99-2909	9611-99-2910	9611-99-2910	9611-99-2910
f	1	Holder	31353-0453-1	31353-0453-1	31353-0453-1	31353-0454-1	31353-0454-1	31353-0454-1
g●	1	Valve body packing, PTFE	31353-0451-1	31353-0451-1	31353-0451-1	31353-0451-2	31353-0451-2	31353-0451-2

Service kits special lip seals (marked ●)

●		Service kit EPDM	9611-92-0471	9611-92-0475	9611-92-0479	9611-92-0483	9611-92-0487	9611-92-0491
●		Service kit NBR	9611-92-0472	9611-92-0476	9611-92-0480	9611-92-0484	9611-92-0488	9611-92-0492
●		Service kit FPM	9611-92-0473	9611-92-0477	9611-92-0481	9611-92-0485	9611-92-0489	9611-92-0493
●		Service kit FEP	9611-92-0474	9611-92-0478	9611-92-0482	9611-92-0486	9611-92-0490	9611-92-0494

The information contained herein is correct at the time of issue but may be subject to change without prior notice.