

Opening indicator

PN10
PN16

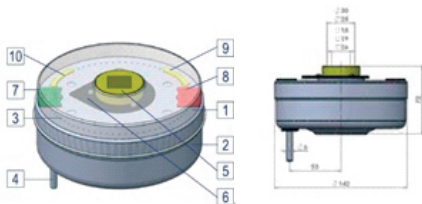
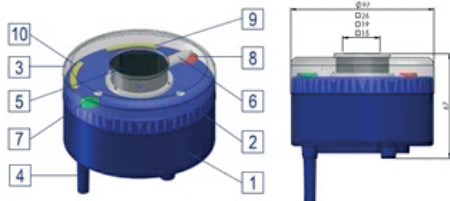
WATER

SEWAGE

GAS

Type 9001

Type 9002



INDEX	The size of the square of the indicator [mm]	Turn for open	Weight [kg]	Selection of the indicator for the housing in relation to the connection square
TH-9001-0019-0081	19	81	0,2	9006/9007/9010/9011 sq.12, 14, 17, 19
TH-9001-0026-0081	26	81	0,2	9006/9007/9010/9011 sq.24, 27, 32, 36

*other square sizes are possible

INDEX	The size of the square of the indicator [mm]	Turn for open	Weight [kg]	Selection of the indicator for the housing in relation to the connection square
TH-9002-0019-0470	19	470	1,7	9006/9007/9010/9011 sq.12, 14, 17, 19
TH-9002-0026-0470	26	470	1,7	9006/9007/9010/9011 sq.24, 27, 32, 36
TH-9002-0019-1390	19	1390	1,7	9006/9007/9010/9011 sq.12, 14, 17, 19
TH-9002-0026-1390	26	1390	1,7	9006/9007/9010/9011 sq.24, 27, 32, 36

*other square sizes are possible

Product description (standard execution):

- The indicator is made completely of plastic
- Graphic designation of the position of the indicator by fixing marks

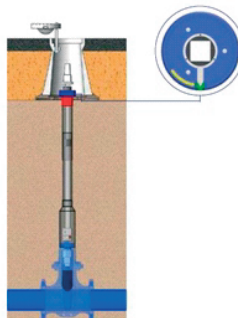
No	Part	9001	9002
1	Protective cover	PE	PE
2	Body		AlSi
3	Position of the openings		
4	Fixing pin		1,4301
5	Square of embedding		ZnAl4
6	Indication		1,4301
7	Sign position		PA
8	Direction arrows		PE
9			
10			

Product description (standard execution):

- Indicator body made of aluminum
- Graphical indication of the location of the pointer by fixing marks
- Waterproof

Installation:

- In order to assemble the indicator on the housing:
- pull off the extension spindle cap
 - shorten the casing cover pipe by the height of the indicator
 - make a hole in the extension spindle cover for the index indicator pin (4)



Application:

Indicator intended for use on fixed or telescopic enclosures as an element determining the position of the valve closing assembly.

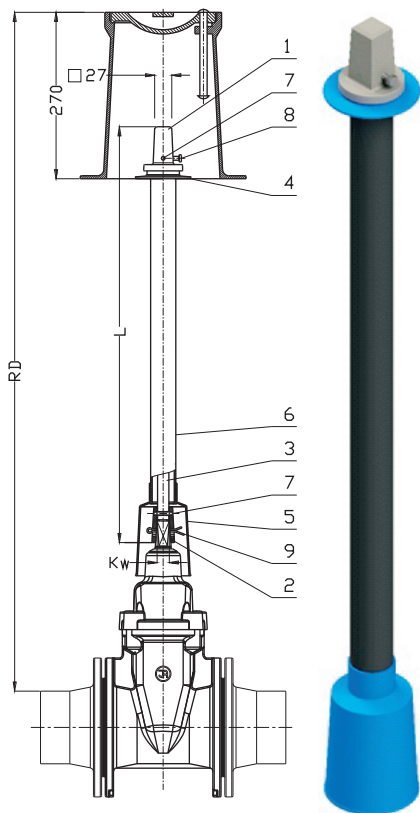
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Extension spindle rigid

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No.	Part	Standard execution
1	Cap	Ductile cast iron EN-GJS 400-15 EN 1563
2	Coupling	Ductile cast iron EN-GJS-400-15 EN 1563
3	Spindle	Galvanized steel Steel Fe/Zn5 EN 10025-2
4	Collar	Polyethylene PE EN ISO 17855-1
5	Pipe bell	Polyethylene PE EN ISO 17855-1
6	Casing liner	Polyethylene PE EN ISO 17855-1
7	Spring pin	Steel 60G; Stainless steel EN ISO 8752
8	Screw	Steel Fe/Zn5 EN ISO 4017
9	Split cotter	Steel Fe/Zn5 EN ISO 1234

TYP 9010		L [mm] / Weight [kg]					
DN	K _w	RD 750	RD 1000	RD 1250	RD 1500	RD 2000	RD 2500
25	12	437	687	937	1187	1687	2187
		1,8	2,5	3,1	3,8	5,1	6,5
32	12	459	709	959	1209	1709	2209
		1,9	2,6	3,2	3,8	5,2	6,6
40	14	392	642	892	1142	1642	2142
		1,7	2,4	3,0	3,6	5,0	6,4
50	14	387	637	887	1137	1637	2137
		1,7	2,4	3,0	3,6	5,0	6,4
65	17	366	616	866	1116	1616	2116
		1,6	2,3	3,0	3,7	5,1	6,5
80	17	348	598	848	1098	1598	2098
		1,5	2,2	2,9	3,6	5,0	6,4
100	19	323	573	823	1073	1573	2073
		1,5	2,2	2,9	3,6	5,0	6,4
125	19	296	546	796	1046	1546	2046
		1,4	2,1	2,8	3,5	4,9	6,3
150	19	-	467	717	967	1467	1967
		-	1,9	2,6	3,3	4,7	6,1
200	24	-	447	697	947	1447	1947
		-	2,6	3,4	4,2	5,9	7,6
250	27	-	374	624	874	1374	1874
		-	2,3	3,1	4,0	5,7	7,4
300	27	-	325	575	825	1325	1825
		-	2,1	2,9	3,8	5,5	7,2
350	27	-	268	518	768	1268	1768
		-	1,9	2,7	3,6	5,3	7,0
400	32	-	-	332	582	1082	1582
		-	-	3,2	4,5	7,1	9,8
500	36	-	-	-	427	927	1427
		-	-	-	3,8	6,4	9,1
600	36	-	-	-	308	808	1308
		-	-	-	3,1	5,8	8,4

Product description (standard execution):

- The possibility of shortening the mounting surface area
- Cap made of ductile cast iron EN-GJS 400-15
- Galvanized steel square section 18mm
- Ductile cast iron EN-GJS-400-15 coupling mounted on the valve spindle with the split cotter
- Extension spindle liner cap pipe bell and thrust washer made of PE
- Pipe bell protects against dirt penetration from the ground

Application:

Simple and rigid extension of the valve spindle.
Underground mounted Armature operating.

Accessories:

- With pillar handwheel see: 9113
- With pillar for electric actuator see: 9114
- With T-key see: 9015
- With street box see: 9501; 9502; 9503; 9504; 9509

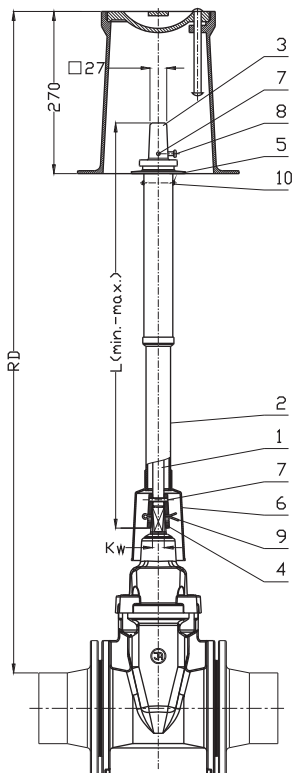
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Telescopic extension spindle

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PN16

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No.	Part	Standard execution
1	Spindle	Galvanized steel Steel Fe/Zn5 EN 10025-2
2	Casing liner	Poly ethylene PE EN ISO 17855-1
3	Cap	Ductile cast iron EN-GJS 400-15 EN 1563
4	Coupling	Ductile cast iron EN-GJS 400-15 EN 1563
5	Collar	Poly ethylene PE EN ISO 17855-1
6	Pipe bell	Poly ethylene PE EN ISO 17855-1
7	Spring pin	Steel Fe/Zn5 EN ISO 8752
8	Screw	Steel Fe/Zn5 EN ISO 4017
9	Split cotter	Steel Fe/Zn5 EN ISO 1234
10	Screw	Steel Fe/Zn5 EN ISO 7049

Product description (standard execution):

- Spindle secured against tearing, the ability to adapt to the terrain in the given range
- Cap made of ductile cast iron EN-GJS-400-15
- The spindle tightly fitted into the square profile
- The coupling of ductile iron EN-GJS-400-15 mounted on the valve stem with the split cotter
- Casing liner cup pipe bell and thrust washer made of PE
- Pipe bell protects against pollution from the ground
- Height adjuster for setting casing at any height

Application:

Flexible and safe extension of the valve stem. Underground mounted

Accessories:

- With pillar handwheel see: 9113
- With pillar for electric actuator see: 9114
- With T-key see: 9015
- With street box see: 9501; 9502; 9503; 9504; 9509

TYP 9011	RD	600-900		900-1300		1300-1800		2000-2500		2500-3100	
		L _(min) [mm]	L _(max) [mm]	L _(min) [mm]	L _(max) [mm]	L _(min) [mm]	L _(max) [mm]	L _(min) [mm]	L _(max) [mm]	L _(min) [mm]	L _(max) [mm]
25	12	Weight [kg]		Weight [kg]		Weight [kg]		Weight [kg]		Weight [kg]	
		436	611	611	696	986	1486	1686	2186	2237	2837
32	12	RD 759-925		RD 925-1300		RD 1300-1800		RD 2000-2500		RD 2500-3100	
		433	633	633	1008	1008	1508	1708	2208	2259	2859
40	14	RD 775-950		RD 950-1300		RD 1300-1800		RD 2000-2500		RD 2500-3100	
		416	591	591	941	941	1441	1641	2141	2198	2798
50	14	RD 775-950		RD 950-1300		RD 1300-1800		RD 2000-2500		RD 2500-3100	
		411	596	596	936	936	1436	1636	2136	2193	2793
65	17	RD 975-1300		RD 1300-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		580	915	915	1415	1415	1615	2115	2166	2766	3366
80	17	RD 975-1300		RD 1300-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		572	897	897	1397	1397	1597	2097	2148	2748	3348
100	19	RD 1000-1300		RD 1300-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		572	872	872	1372	1372	1572	2072	2123	2723	3323
125	19	RD 1000-1300		RD 1300-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		545	845	845	1345	1345	1545	2045	2096	2696	3296
150	19	RD 1050-1300		RD 1300-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		516	766	766	1266	1266	1466	1966	2017	2617	3217
200	24	RD 1075-1325		RD 1325-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		501	751	751	1226	1226	1426	1926	1965	2565	3165
250	27	RD 1125-1350		RD 1350-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		478	703	703	1153	1153	1353	1853	1892	2492	3092
300	27	RD 1175-1375		RD 1375-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		479	779	779	1104	1104	1304	1804	1843	2443	3043
350	27	RD 1200-1400		RD 1400-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700	
		447	847	847	1047	1047	1247	1747	1786	2386	2986
400	32	RD 1525-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700		RD 3700-4300	
		607	882	882	1082	1082	1582	1582	2182	2782	3382
400	36	RD 1600-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700		RD 3700-4300	
		527	727	727	927	927	1427	1427	2027	2627	3227
600	36	RD 1650-1800		RD 1800-2500		RD 2500-3100		RD 3100-3700		RD 3700-4300	
		458	608	608	808	808	1308	1308	1908	2508	3108

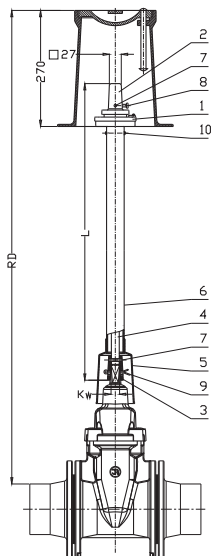
Fixed extension spindle rigid with opening indicator

PN10
PN16

WATER

SEWAGE

GAS



No	Part	Standard execution	No	Part	Standard execution
1	Opening indicator	Polyethylene PE EN ISO 17855-1	6	Casing liner	Polyethylene PE EN ISO 17855-1
2	Cap	Ductile cast iron EN-GJS-400-15 EN 1563	7	Spring pin	Steel Fe/Zn5 EN ISO 8752
3	Coupling	Ductile cast iron EN-GJS-400-15 EN 1563	8	Screw	Steel Fe/Zn5 EN ISO 4017
4	Rod	Steel Fe/Zn5 EN 10025-2	9	Split cotter	Steel Fe/Zn5 EN ISO 1234
5	Pipe bell	Polyethylene PE EN ISO 17855-1	10	Screw	Steel Fe/Zn5 EN ISO 7049

Product description (standard execution):

- The possibility of shortening the mounting surface area
- Cap made of ductile cast iron EN-GJS-400-15
- The spindle tightly fitted into the square profile
- The coupling of ductile iron EN-GJS-400-15
 - Mounted on the valve stem with the split cotter
- Indicator body entirely made of PE polyethylene
- Graphical indication of the position of the indicator by fixing marks
- Casing liner cup pipe bell and thrust washer made of PE
- Pipe bell protects against pollution from the ground
- All parts of the indicator are made of non-corrosive elements
- Maximum speed: for dimensions up to DN200 - 49 turns
above DN200 - 121 turns

Application:

Opening indicator as an element determining the position of the valve closing assembly
Flexible and safe extension of the valve stem. Underground mounted

Accessories:

With pillar for electric actuator see: 9114
With T-key see: 9015
With street box see: 9501; 9502; 9503; 9504; 9505, 9506, 9507, 9508, 9509, 9514

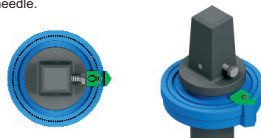
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TYP 9020		L [mm] / Weight [kg]					
DN	Kw	RD 750	RD 1000	RD 1250	RD 1500	RD 2000	RD 2500
Spotter	12	356	606	856	1106	1606	2106
		1,7	2,4	3,0	3,7	5,1	6,4
25	12	458	708	958	1208	1708	2208
		2,0	2,7	3,3	4,0	5,3	6,7
32	12	480	730	980	1230	1730	2230
		2,1	2,8	3,4	4,0	5,4	6,8
40	14	413	663	913	1163	1663	2163
		1,9	2,6	3,2	3,8	5,2	6,6
50	14	408	658	908	1158	1658	2158
		1,9	2,6	3,2	3,8	5,2	6,6
65	17	387	637	887	1137	1637	2137
		1,8	2,5	3,2	3,9	5,3	6,7
80	17	369	619	869	1119	1619	2119
		1,7	2,4	3,1	3,8	5,2	6,6
100	19	344	594	844	1094	1594	2094
		1,7	2,4	3,1	3,8	5,2	6,6
125	19	317	567	817	1067	1567	2067
		1,6	2,3	3,0	3,7	5,1	6,5
150	19	-	488	738	988	1488	1988
		-	2,1	2,8	3,5	4,9	6,3
200	24	-	473	723	973	1473	1973
		-	2,8	3,6	4,4	6,1	7,8
250	27	-	400	650	900	1400	1900
		-	2,5	3,3	4,2	5,9	7,6
300	27	-	351	601	851	1351	1851
		-	2,3	3,1	4,0	5,7	7,4
350	27	-	294	544	794	1294	1794
		-	2,1	2,9	3,8	5,5	7,2
400	32	-	-	359	609	1109	1609
		-	-	3,4	4,7	7,3	10,0
500	36	-	-	-	454	954	1454
		-	-	-	4,0	6,6	9,3
600	36	-	-	-	-	335	835
		-	-	-	-	3,3	6,0

Installation:

Setting the indicator:

1. Open the valve to the maximum, then screw in the "O" sign so that it coincides with the needle.



2. Close the valve as much as possible, then screw in the "C" sign so that it coincides with the needle.



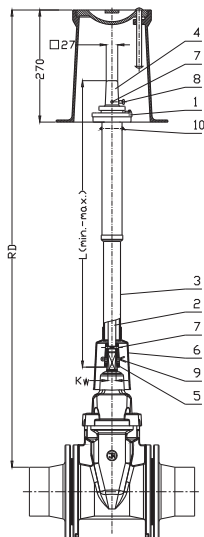
Telescopic extension spindle with an opening indicator

PN10
PN16

WATER

SEWAGE

GAS



No	Part	Standard execution	No	Part	Standard execution
1	Opening indicator	Poly ethylene PE EN ISO 17855-1	6	Cup	Poly ethylene PE EN ISO 17855-1
2	Spindle	Steel Fe/Zn5 EN 10025-2	7	Spring pin	Steel Fe/Zn5 EN ISO 8752
3	Casing liner	Poly ethylene PE EN ISO 17855-1	8	Screw	Steel Fe/Zn5 EN ISO 4017
4	Cap	Ductile cast iron EN-GJS-400-15 EN 1563	9	Split cotter	Steel Fe/Zn5 EN ISO 1234
5	Coupling	Ductile cast iron EN-GJS-400-15 EN 1563	10	Screw	Steel Fe/Zn5 EN ISO 7049

Product description (standard execution):

- Spindle secured against tearing, the ability to fit the area within the specified range
- The spindle rod is tightly matched to the square profile (profile rod and galvanized)
- The possibility of shortening the mounting surface area
- Cap made of ductile cast iron EN-GJS-400-15
- The spindle tightly fitted into the square profile
- The coupling of ductile iron EN-GJS-400-15
- Mounted on the valve stem with the split cotter
- Indicator body entirely made of PE polyethylene
- Graphical indication of the position of the indicator by fixing marks
- Casing liner cup pipe bell and thrust washer made of PE
- Pipe bell protects against pollution from the ground
- All parts of the indicator are made of non-corrosive elements
- Maximum speed: for dimensions up to DN200 - 49 turns above DN200 - 121 turns

Application:

Opening indicator as an element determining the position of the valve closing assembly
Flexible and safe extension of the valve stem. Underground mounted

Accessories:

With pillar for electric actuator see: 9114
With T-key see: 9015
With street box see: 9501; 9502; 9503; 9504; 9505, 9506, 9507, 9508, 9509, 9514

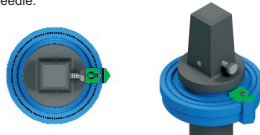
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DN	Kw	RD 600-900		RD 900-1300		RD 1300-1800		RD 2000-2500		RD 2500-3100	
		L _{max} [mm]	L _{min} [mm]	L _{max} [mm]	L _{min} [mm]	L _{max} [mm]	L _{min} [mm]	L _{max} [mm]	L _{min} [mm]	L _{max} [mm]	L _{min} [mm]
Spotter	12	Weight [kg]		Weight [kg]		Weight [kg]		Weight [kg]		Weight [kg]	
		430 580	580 905	905 1405	1605 2105	2161 2761					
25	12	2.3		3.1		4.1		5.1		12.8	
		RD 750-925	RD 925-1300	1007 1507	1707 2207	2263 2863					
32	12	2.4		3.3		4.3		5.5		13.2	
		RD 725-925	RD 925-1300	1029 1529	1729 2229	2285 2885					
40	14	2.5		3.4		4.3		5.5		13.2	
		RD 775-950	RD 950-1300	962 1462	1662 2162	2224 2824					
50	14	4.37 612		612 962		4.2		5.4		13.3	
		RD 775-950	RD 950-1300	957 1457	1657 2157	2219 2819					
65	17	4.32 607		607 957		4.2		5.4		13.3	
		RD 975-1300	RD 1300-1800	936 1436	1636 2136	2192 2792					
80	17	611 936		3.1		4.2		5.4		13.2	
		RD 975-1300	RD 1300-1800	918 1418	1618 2118	2174 2774					
100	19	593 918		3.1		4.2		5.3		13.1	
		RD 1000-1300	RD 1300-1800	893 1393	1593 2093	2149 2749					
125	19	593 893		3.0		4.1		5.3		13.0	
		RD 1000-1300	RD 1300-1800	866 1366	1566 2066	2122 2722					
150	19	586 866		3.0		4.1		5.2		12.9	
		RD 1050-1300	RD 1300-1800	787 1287	1487 1987	2043 2643					
200	24	537 787		2.8		3.9		5.1		12.6	
		RD 1075-1325	RD 1325-1800	772 1272	1472 1972	2028 2628					
250	27	522 772		3.1		4.2		5.3		12.5	
		RD 1125-1350	RD 1350-1800	724 1224	1424 1924	2080 2680					
300	27	499 724		3.0		4.1		5.3		12.3	
		RD 1175-1375	RD 1375-1800	700 1200	1400 1900	2056 2656					
350	27	500 700		2.9		3.9		5.2		12.2	
		RD 1200-1400	RD 1400-1800	668 1168	1368 1868	2024 2624					
400	32	468 668		2.9		3.8		5.1		12.0	
		RD 1525-1800	RD 1800-2500	908 1408	1608 2108	2208					
500	36	633 908		6.2		9.1		11.4			
		RD 1600-1800	RD 1800-2500	553 753	953 1453	1453 2053					
600	36	553 753		5.6		8.7		11.0			
		RD 1650-1800	RD 1800-2500	484 634	834 1334	1334 1934					
		484 634		5.0		8.3		10.6			

Installation:

Setting the indicator:

1. Open the valve to the maximum, then screw in the "O" sign so that it coincides with the needle.



2. Close the valve as much as possible, then screw in the "C" sign so that it coincides with the needle.



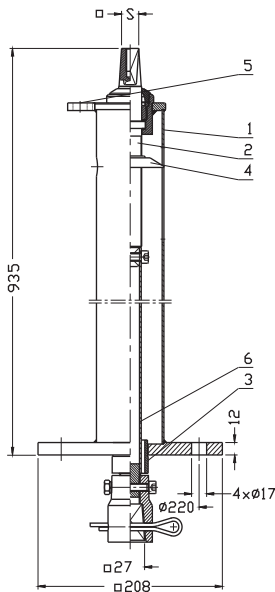
**Pillar / stand
with position indicator**

**PN10
PN16**

WATER

SEWAGE

GAS



Application:

Water



Fire-fighting system



Gas



Index	S	F	Turn for full open	Weight	Fitting samples		
					2111, 2002, 2311, 2312, 2314	2005, 2006	4493, 4496, 4497 gearbox
	[mm]	[Nm]		[kg]	diameter		
9113-064	19	350	64	12	DN40-DN300	DN50-DN150	DN40-DN200
9113-090	27	500	90	14	DN350-DN700	DN200-DN350	DN250-DN450
9113-250	27	500	250	17	DN800-DN1200	DN400-DN1000	DN500-DN1200

No.	Part	Standard execution
1	Body	Stainless Steel 1.4301 EN 10088-1
2	Stem	Stainless Steel 1.4021 EN 10088-1
3	Centring bearing	PE 100 SDR 11
4	Indicator	Brass CW617N EN 12165
5	Protection lug	Stainless Steel 1.4301 EN 10088-1
6	Spindle	Stainless Steel 1.4301 EN 10088-1

Product description (standard execution):

- Fully monolithic body (base, stand pipe, cover) made of stainless steel
- Axial spindle with centring bearing
- Stem stainless steel ball bearing in the vertical and horizontal way
- Protection lug for locking device
- Mechanical position indicator

Application:

Recommended for valves mounted at lower levels in wells or directly in the ground.

Connection with the valve:
axial - extension spindle
not axial - extension spindle with cardans

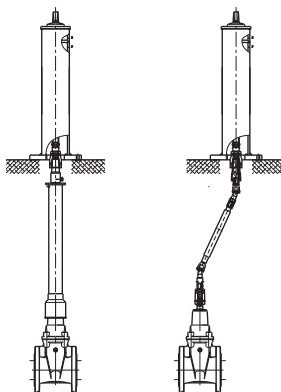
Assembly:

- Rigid extension spindle see: 9006; 9010
- Telescopic extension spindle see: 9007; 9011
- Extension spindle see: 9008
- Rigid extension spindle with cardan see: 9116
- Handwheel see: 9301
- Locking device

Execution variant:

- With inductive or electromechanical sensors
- Other executions on request

Installation:



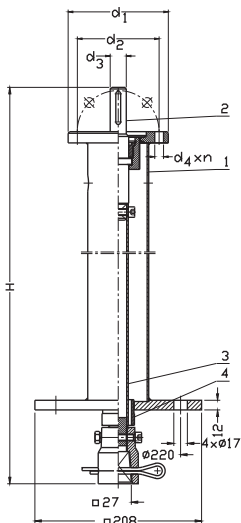
Pillar / stand for actuator

PN10
PN16

WATER

SEWAGE

GAS



Connection B3 ISO 5210	H	d ₁	d ₂	d ₃	d ₄	n	Weight
[mm]	[mm]	[mm]			[szt]	[kg]	
F10	685	125	102	20	11	4	13
F14		175	140	30	17	4	16

No.	Part	Standard execution
1	Body	Stainless Steel 1.4301 EN 10088-1
2	Stem	Stainless Steel 1.4021 EN 10088-1
3	Spindle	Stainless Steel 1.4301 EN 10088-1
4	Centring bearing	PE 100 SDR 11 EN 1555

Product description (standard execution):

- Fully monolithic body (base, stand pipe, cover) made of stainless steel
- Axial spindle with centring bearing
- Stem stainless steel ball bearing in the vertical and horizontal way

Application:

Recommended for valves mounted at lower levels in wells or directly in the ground.

Connection with the valve:
axial – extension spindle
not axial - extension spindle with cardans

Assembly:

Rigid extension spindle see: 9006; 9010
Telescopic extension spindle see: 9007; 9011
Extension spindle see: 9008
Rigid extension spindle with cardan see: 9116
Electric drive

Execution variant:

Other executions on request

Installation:

