

SYSTEM 2000

Examples



SYSTEM 2000 All Socket Tee Mainline PVC pipe / Branch PE pipe - Total restraint -



SYSTEM 2000 Transition Connector joining PVC to PE pipe - Total restraint -



Pressure test: **SYSTEM 2000 Flange Adaptor** DN 400 with PE pipe o. d. 450 mm (wall thickness 28,4 mm) at 23 bar

SYSTEM 2000 Flange Adaptor DN 400 on PE pipes o. d. 450 mm enables the economic use of DN 400 fittings

Our quality control system has been certified according to ÖNORM ISO 9001/EN 29001 by **ÖQS**, the Austrian association for certification of quality control systems.

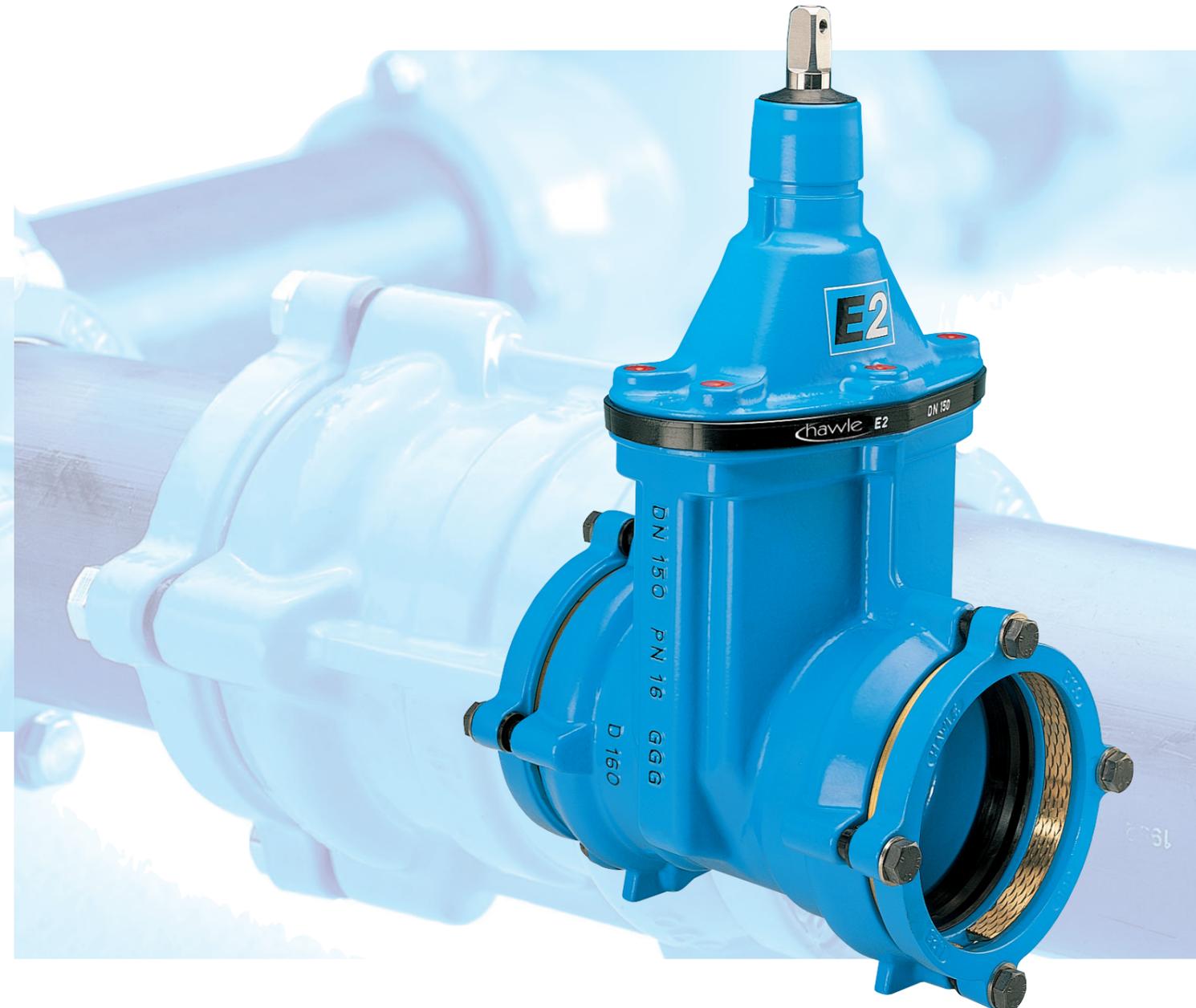


Illustrations, technical data, dimensions and weights are subject to alteration without notice.



SYSTEM 2000

Valves and Fittings



Your distributor:



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SYSTEM 2000

Valves and Fittings for PE- (PE 80/100) AND PVC pipes, DN 50 - 400 (o.d. 63-450), Water up to PN 16, Gas PN 4

Design features

- Total restraint
- Low force for installation - easy to dismantle
- Easy to install in all weather conditions
- High quality corrosion protection using the GSK fluidised bed epoxy coating system



Types



for Water

- No. 4040E2 E2 Gate valve with double socket
- No. 4041E2 E2 Gate valve with flange and socket
- No. 4343E2 E2 All socket Combi-T

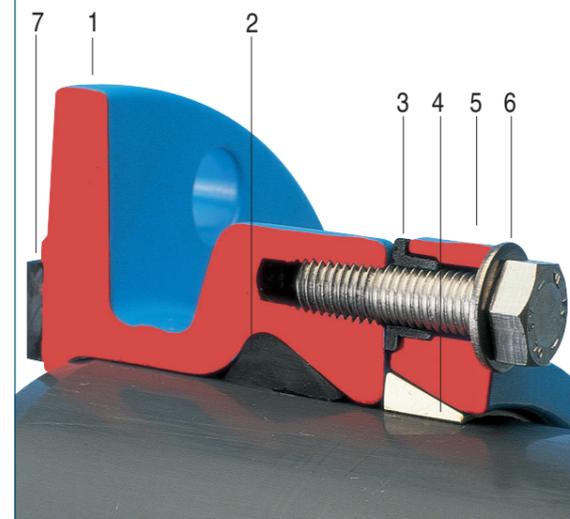
for Gas

- No. 4045E2 E2 Gate valve with double socket
- No. 4046E2 E2 Gate valve with flange and socket
- No. 4346E2 E2 All socket Combi-T

SYSTEM 2000 for WATER

Material:

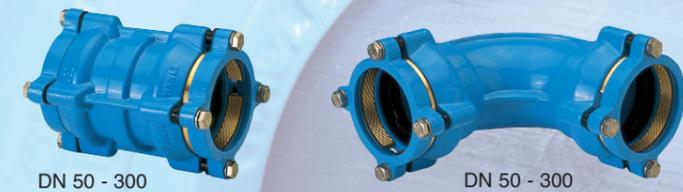
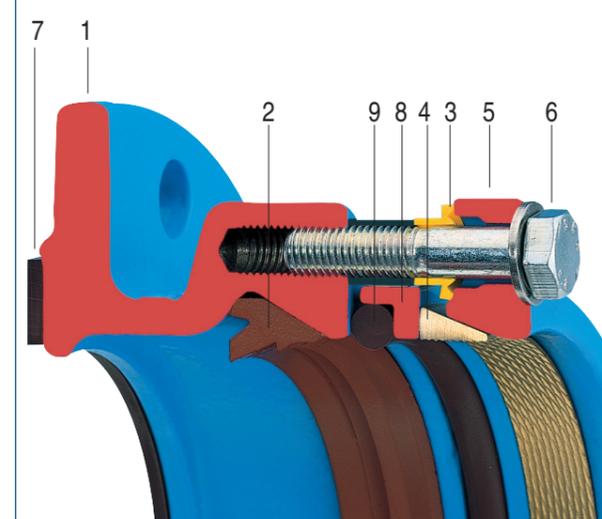
- 1 Body: ductile iron, epoxy powder coated
- 2 Lip seal: elastomer, suitable for potable water
- 3 Spacer bushes: PE
- 4 Grip ring: Ms 58 (dezincification resistant brass), up to DN 300 Rg7
- 5 Lock ring: ductile iron, epoxy powder coated
- 6 Bolts: A 2 (stainless)
- 7 Flat gasket: elastomer, suitable for potable water



SYSTEM 2000 for GAS

Material:

- 1 Body: ductile iron, epoxy powder coated
- 2 Lip seal: elastomer
- 3 Spacer bushes: PE
- 4 Grip ring: Ms 58 (dezincification resistant brass), up to DN 300 Rg7
- 5 Lock ring: ductile iron, epoxy powder coated
- 6 Bolts: A 2 (stainless)
- 7 Flat gasket: elastomer
- 8 O ring holder: ductile iron, epoxy powder coated
- 9 O ring: elastomer



for Water

- No. 0430 Connector
- No. 8535 Bend 90°
- No. 8545 Bend 45°
- No. 8555 Bend 30°

for Gas

- No. 0435 Connector
- No. 8536 Bend 90°
- No. 8546 Bend 45°
- No. 8556 Bend 30°



for Water

- No. 8525 Double Socket Tee with flanged branch, equal and reducing
- No. 8515 All Socket Tee, equal and reducing

for Gas

- No. 8526 Double Socket Tee with flanged branch, equal and reducing
- No. 8516 All Socket Tee, equal and reducing



for Water

- No. 0400 Flange Adaptor, equal and reducing
- No. 8075 End Cap
- No. 5045 Duck Foot Bend for Hydrant connection

for Gas

- No. 0405 Flange Adaptor, equal and reducing
- No. 8076 End Cap

SYSTEM 2000

Examples



SYSTEM 2000 Double Socket Bend 90°

Space and cost savings installation for PVC and PE pipes
- Total restraint -



SYSTEM 2000 Flange Adaptor

Connects PVC and PE pipes to existing flanged fittings
- Total restraint -



SYSTEM 2000 End Cap

with house service and/or flushing valve; flushing the pipeline properly maintains high water quality
- Total restraint -



SYSTEM 2000 End Cap

for pressure testing of sections or final installations of PVC and PE pipe systems
- Total restraint -



SYSTEM 2000 End Cap

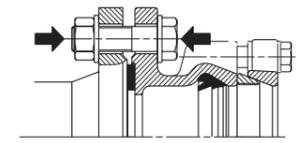
fitted with air valve
- Total restraint -

SYSTEM 2000

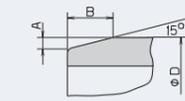
Assembly instructions - Dismantling instructions - Tensile testing

Assembly instructions:

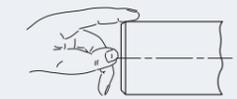
For flange adaptors: bolt the flange to the mating flange first.



Chamfer the pipe
Use lubricant



Ø D	A	B
63 - 40	2,5	10
160 - 180	4	16
200 - 225	5	20
250 - 315	7	25
355 - 450	9	35

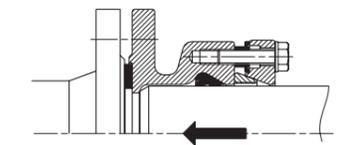


Do not use oil !

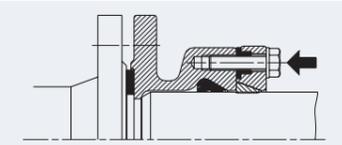
Push the pipe to the end of the socket.

(For GAS please note: the pipe must pass both seal resistance points - O ring and lip seal)

For thinwalled PE-pipes (up to 3 mm wall thickness), low internal pressure as well as for GAS we recommend using a support liner

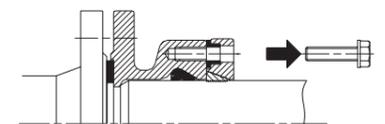


Tighten the lock ring bolts crosswise until lock ring stops against the body; for GAS: tighten the lock ring bolts crosswise until the O ring holder stops against the body and the lock ring stops against the O ring holder

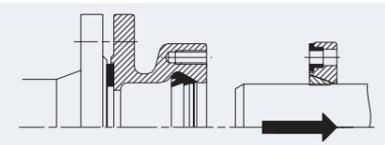


Dismantling instruction:

Undo and remove lock ring bolts.



Twist and withdraw the pipe



Tensile testing:

The following maximum tensile loads have been established.

Test data: HAWLE test laboratory tensile testing machine

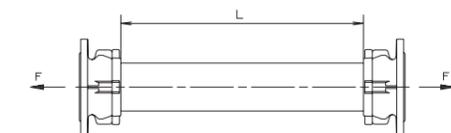
HDPE pipe (PE 80) DIN 8075 - ÖNORM B 5172 PN 10 (Gas PN 4)

Data established by use of a support liner and under 0 bar internal pressure. Room temperature: 23° C

Speed of tensile test (mm/min.): 0,1 x the free pipe length (L)

This table shows the maximum end load capacity of a System 2000 connection, compared with the effective theoretical loads in a PE gas pipeline with max. 4 bar.

A System 2000 connection provides a safety factor of 4 to 6 times!



* 1 kN = 100 kp

Pipe Ø mm	Theoretical tensile load - (kN*) at 10 bar internal pressure	Max. tensile load established in tests - (kN*)
63	3,15	20
75	4,42	28
90	6,37	38
110	9,50	56
125	12,27	63
140	15,40	66
160	20,10	98
180	25,45	130
200	31,40	145
225	39,80	153
250	49,10	233
280	61,60	215
315	77,80	270