

2.2.a "Optibal" Ball valves



Content	379
"Optibal" Ball valves PN 16	380
"Optibal" Ball valves with coupling PN 16	382
Accessories	382
Insulation	382
"Optibal" Ball valves with lever PN 16	383
"Optibal" Ball valves with T-handle PN 16	384
Stem extensions	384
Conversion set plastic handle (anthracite)	384
Ball valves "DZR"	385
Ball valves NPT	386
"Optibal" High temperature ball valves PN 16	387
"Optibal" High pressure ball valves PN 40	388
Accessories	388

2.2.b "Hygate" Gate valves



Content	389
"Hygate ATB" Gate valves PN 25	390
"Hygate ATR" Gate valves PN 25	390
"Hygate AFC" Flanged gate valves PN 16	391
"Hygate AFC" Flanged gate valves PN 10	391

2.2.c Valves PN 16/25



Content	393
Oblique pattern globe valves with position indicator PN 25	394
Straight pattern globe valves with position indicator PN 25	394
Oblique pattern globe valves PN 25	394
Oblique pattern drain valves PN 25	394
Lockshield spindles	395
Airvent PN 25	395
Accessories	395

2.2.d Butterfly valves



Content	397
Lugged butterfly valves PN 16	398
Wafer butterfly valves PN 16	398
Accessories	399

2.2

2.2.e Piston type spring assisted check valves, swing type check valves



Content	401
Piston type spring assisted check valves (female threaded model) PN 25	402
Swing type check valves (female threaded model) PN 16	402
Swing type check valves (flanged model) PN 16	403
Swing type check valves (wafer model) PN 16	403
Double swing type check valves (wafer model) PN 16	403

2.2.f Spare parts







Content	405
Handwheels	406



2.2.a "Optibal" Ball valves

Content

"Optibal" Ball valves PN 16	380
"Optibal" Ball valves with coupling PN 16	382
Accessories	382
Insulation	382
"Optibal" Ball valves with lever PN 16	383
"Optibal" Ball valves with T-handle PN 16	384
Stem extensions	384
Conversion set plastic handle (anthracite)	384
Ball valves "DZR"	385
Ball valves NPT	386
"Optibal" High temperature ball valves PN 16	387
"Optibal" High pressure ball valves PN 40	388
Accessories	388

Article	kvs	Packing unit	Article-No.	Hint
"Optibal" Ball valves PN 16				<p>Application: Pipe fitting for fluids. Max. operating pressure p_s: 16 bar (PN 16), for cold water 20 bar, for air and other harmless gases (not for gaseous fluids group 1 according to directive 2014/68/EU) 10 bar. Operating temperature t_s: -10 °C up to +100 °C Attention: Prevent formation of ice as it can destroy the pipework and valve. Chrome plated brass ball, PTFE seats, FKM O-ring seal.</p> <p>Advantages:</p> <ul style="list-style-type: none"> - full flow - diverse applications - all standard handles available - simple insulation of models with extended plastic handle - high pressure rating due to blow-off proof stem and high body resistance - ball surface hard-chrome plated
brass, nickel plated, full flow, extended plastic handle (anthracite) with red cover plug for riser identification				
both ports female thread				
	DN 10	8.80	(10) 1077103	
	DN 15	22.00	(10) 1077104	
	DN 20	43.00	(10) 1077106	
	DN 25	67.00	(10) 1077108	
	DN 32	99.00	(8) 1077110	
	DN 40	143.00	(6) 1077112	
	DN 50	254.00	(4) 1077116	
as above, with thermometer (anthracite)				
	DN 10	8.80	(10) 1078003	
	DN 15	22.00	(10) 1078004	
	DN 20	43.00	(10) 1078006	
	DN 25	67.00	(10) 1078008	
	DN 32	99.00	(8) 1078010	
	DN 40	143.00	(6) 1078012	
	DN 50	254.00	(4) 1078016	
one port male thread, one port female thread				
	DN 10	8.80	(10) 1077303	
	DN 15	22.00	(10) 1077304	
	DN 20	43.00	(10) 1077306	
	DN 25	67.00	(10) 1077308	
	DN 32	99.00	(8) 1077310	
	DN 40	143.00	(6) 1077312	
	DN 50	254.00	(4) 1077316	
both ports female thread with draining valve (connection thread G 1/4)				
	DN 15		(10) 1077804	
	DN 20		(5) 1077806	
	DN 25		(5) 1077808	
	DN 32		(5) 1077810	

With plug and draining valve.



both ports press connection

Article	P2	Packing unit	Article-No.
DN 15	Ø 15 mm	(10)	1077162
DN 15	Ø 18 mm	(10)	1077163
DN 20	Ø 22 mm	(10)	1077164
DN 25	Ø 28 mm	(10)	1077165
DN 32	Ø 35 mm	(5)	1077166

DN 40 and DN 50 see item no. 4208857/58: page 682

Application:
Pipe fitting for fluids.
Max. operating pressure p_s : 16 bar (PN 16), for cold water 20 bar, for air and other harmless gases (not for gaseous fluids group 1 according to directive 2014/68/EU) 10 bar.
Operating temperature t_s : -10 °C up to +100 °C
Attention: Prevent formation of ice as it can destroy the pipework and valve.
Chrome plated brass ball, PTFE seats, FKM O-ring seal.



one port female thread,
one port press connection

DN 15	G ½	Ø 15 mm	(10)	1077152
DN 15	G ½	Ø 18 mm	(10)	1077153
DN 20	G ¾	Ø 22 mm	(10)	1077154
DN 25	G 1	Ø 28 mm	(10)	1077155
DN 32	G 1 ¼	Ø 35 mm	(5)	1077156

Advantages:
- full flow
- diverse applications
- all standard handles available
- simple insulation of models with extended plastic handle
- high pressure rating due to blow-off proof stem and high body resistance
- ball surface hard-chrome plated

Press connection:
For the direct connection of copper pipes according to DIN EN 1057 / DVGW GW 392, stainless steel pipes according to DIN EN 10088 / DVGW GW 541 and thin-walled C-steel pipe (material no. E195/1.0034) according to DIN EN 10305-3. Pressing must be carried out to tighten the connection. Only use press jaws with the original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in corresponding size. Processing must be carried out according to the installation instructions.

2.2

Article	Packing unit	Article-No.	Hint
---------	--------------	-------------	------

"Optibal" Ball valves with coupling PN 16

brass, nickel plated, full flow,
 extended plastic handle (anthracite)
 with red cover plug for riser identification

one port with tapered sealing coupling with male thread,
 one port female thread



DN 15	(10)	1075704
DN 20	(10)	1075706
DN 25	(10)	1075708
DN 32	(10)	1075710

Application:
 Pipe fitting for central heating and cooling systems.
 Max. operating pressure p_s : 16 bar (PN 16), for cold water 20 bar, for air and other harmless gases (not for gaseous fluids group 1 according to directive 2014/68/EU) 10 bar.
 Operating temperature t_s : -10 °C up to +100 °C
 Attention: Prevent formation of ice as it can destroy the pipework and valve.
 Chrome plated brass ball, PTFE seats, FKM O-ring seal.

Accessories

Insulation

for brass ball valves "Optibal" with extended plastic handle
 ball valves with female thread (item no. 10771/80/87/91..)



DN 15 (also for DN 10)	1078092
DN 20	1078093
DN 25	1078094
DN 32	1078095
DN 40	1078096
DN 50	1078097

For heating and cooling systems.
 With stem extension also suitable for other handles.
 All ball valves "Optibal" with extended plastic handle can also be coated with standard insulation material.

Blue cover plug
 for riser identification,
 for replacement of the existing red cover plug



DN 10 + DN 15, set = 10 pieces	1077171
DN 20 + DN 25, set = 10 pieces	1077172
DN 32 - DN 50, set = 5 pieces	1077173

Meet the requirements of the German Energy Saving Directive according to appendix 5, table 1, line 5.

Building material class B2 according to DIN 4102.

Operating temperature t_s : +100 °C

Thermometer conversion set, anthracite
 for item no. 10771/73/78/57/91 ..



DN 10 + DN 15	(10)	1077181
DN 20 and DN 25	(10)	1077182
DN 32 - DN 50	(10)	1077183



Stem extensions

brass, with swivel plastic sleeve



		Extension in mm	
up to DN 15	38.5	(10)	1696081
DN 20 + DN 25	39	(10)	1696082

To upgrade brass ball valves "Optibal" with extended plastic handle (except for item no. 10787..).
 By sealing the swivel plastic sleeve against the insulation in cooling systems, no humidity can reach the pipework via the stem extension.
 Only one extension can be used.

Article	kvs	Packing unit	Article-No.	Hint
"Optibal" Ball valves with lever PN 16				Application: Pipe fitting for fluids. Up to DN 50: Max. operating pressure p_s : 16 bar (PN 16) for cold water 20 bar, for air and other harmless gases (not for gaseous fluids group 1 according to directive 2014/68/EU) 10 bar. Operating temperature t_s : -10 °C up to +100 °C DN 65 up to DN 100: Max. operating pressure p_s : 16 bar at 70 °C (PN 16), 12 bar at 85 °C, 8 bar at 100 °C Operating temperature t_s : -10 °C up to +100 °C CE marking according to directive 2014/68/EU. Attention: Prevent formation of ice as it can destroy the pipework and valve.
brass, nickel plated, full flow, galvanised steel lever with plastic coating				
both ports female thread				
	DN 8	5.60	(10) 1076002	
	DN 10	8.80	(10) 1076003	
	DN 15	22.00	(10) 1076004	
	DN 20	43.00	(10) 1076006	
	DN 25	67.00	(10) 1076008	
	DN 32	99.00	(8) 1076010	
	DN 40	143.00	(6) 1076012	
	DN 50	254.00	(4) 1076016	
	DN 65	470.00	(2) 1076020	
	DN 80	720.00	1076024	
	DN 100	1,120.00	1076032	
one port male thread, one port female thread				
	DN 10	8.80	(10) 1076203	
	DN 15	22.00	(10) 1076204	
	DN 20	43.00	(10) 1076206	
	DN 25	67.00	(10) 1076208	
	DN 32	99.00	(8) 1076210	

2.2

2.2

Article	kv s	Packing unit	Article-No.	Hint
---------	---------	-----------------	-------------	------

"Optibal" Ball valves with T-handle PN 16

brass, nickel plated, full flow,
metal T-handle,
both ports female thread



DN 10	8.80	(10)	1076103
DN 15	22.00	(10)	1076104
DN 20	43.00	(10)	1076106
DN 25	67.00	(10)	1076108
DN 32	99.00	(8)	1076110

Application:
Pipe fitting for fluids.
Max. operating pressure p_s : 16 bar
(PN 16), for cold water 20 bar, for air
and other harmless gases (not for gaseous
fluids group 1 according to directive
2017/68/EU) 10 bar.
Operating temperature t_s : -10 °C up to +100 °C
Attention: Prevent formation of ice as it can
destroy the pipework and valve.

one port male thread,
one port female thread



DN 10	8.80	(10)	1076303
DN 15	22.00	(10)	1076304
DN 20	43.00	(10)	1076306
DN 25	67.00	(10)	1076308
DN 32	99.00	(8)	1076310

one port with tapered sealing coupling with male thread,
one port female thread



DN 15		(10)	1075804
DN 20		(10)	1075806
DN 25		(8)	1075808
DN 32		(8)	1075810

Stem extensions

brass, with swivel plastic sleeve

Extension in mm



up to DN 15	38.5	(10)	1076081
DN 20 + DN 25	39	(10)	1076082
DN 32 - DN 50	64	(10)	1076083
DN 65 - DN 100	85	(10)	1076084

To upgrade brass ball valves "Optibal" (except
for item no. 10787..).
By sealing the swivel plastic sleeve against the
insulation in cooling systems, no humidity can
reach the pipework via the stem extension.
To avoid condensation at the lever, the latter
must also be insulated, for instance by slipping
an elastic pipe insulation over the stem
extension and the shank of the plastic handle.
Only one extension can be used.




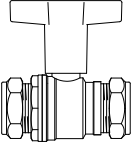

Conversion set plastic handle (anthracite)

with red cover plug for riser identification



up to DN 15		(10)	1076071
DN 20 + DN 25		(10)	1076072
DN 32 - DN 50		(10)	1076073





For subsequent conversion of brass ball valves
"Optibal" with lever or metal T-handle to plastic
handle (except for item no. 10787..) allowing
the insulation of the ball valves.

Article	kvs	Packing unit	Article-No.	Hint
Ball valves "DZR" brass resistant to dezincification, full flow, both ports female thread according to ISO 228/1 (thread also corresponds to Rp according to EN 10226-1). Operating element: Galvanised steel lever with plastic coating				Application: Pipe fitting for central heating and cooling systems. Max. operating pressure p_s : 30 bar pressure impact resistant at 30 °C (PN 30), 6 bar at 120 °C, for air max. 10 bar. Operating temperature t_s : -10 °C up to +120 °C Pressure/temperature allocation see data sheet. Attention: Prevent formation of ice as it can destroy the pipework and valve.
	DN 15	22.00	(10) 1079004	
	DN 20	43.00	(10) 1079006	
	DN 25	67.00	(10) 1079008	
	DN 32	99.00	(8) 1079010	
	DN 40	143.00	(6) 1079012	
	DN 50	254.00	(4) 1079016	
Aluminium T-handle, red				
	DN 15	22.00	(10) 1079404	
	DN 20	43.00	(12) 1079406	
Extended plastic handle (anthracite) with red cover plug for riser identification				
	DN 15	22.00	(8) 1079104	
	DN 20	43.00	(10) 1079106	
	DN 25	67.00	(8) 1079108	
	DN 32	99.00	(6) 1079110	
	DN 40	143.00	(6) 1079112	
	DN 50	254.00	(4) 1079116	
	both ports compression ends for copper pipe according to EN 1254-2			Application: Pipe fitting for central heating and cooling systems. Max. operating pressure p_s : 16 bar pressure impact resistant at 30 °C (PN 16), 10 bar up to 65 °C, 6 bar up to 110 °C and 5 bar up to 120 °C Operating temperature t_s : -10 °C up to +120 °C WRAS certified. Attention: Prevent formation of ice as it can destroy the pipework and valve.
	Extended plastic handle (anthracite) with red cover plug for riser identification			
	15 mm		(8) 1079704	
	22 mm		(10) 1079706	
	28 mm		(8) 1079708	
	35 mm		(6) 1079710	
Locking cap, brass				The locking cap can be mounted instead of the handle. The ball valve is locked in open and shut-off position and setting is secured.
	DN 15		(5) 1079254	
	DN 20 + DN 25		(5) 1079255	
	DN 32 - DN 50		(5) 1079256	

2.2



Article	Packing unit	Article-No.	Hint
Ball valves NPT brass, unplated, full flow extended plastic handle (anthracite) with red cover plug for riser identification both ports NPT female thread according to ANSI B1.20.1			Application: Pipe fitting for central heating and cooling systems. Max. operating pressure p_s : 16 bar Operating temperature t_s : -10 °C up to -100 °C Attention: Prevent formation of ice as it can destroy the pipework and the valve. Chrome plated brass ball, PTFE seats, FKM O-ring seal.
DN 15	NPT 1/2	(8) 1077904	
DN 20	NPT 3/4	(10) 1077906	
DN 25	NPT 1	(8) 1077908	
DN 32	NPT 1 1/4	(6) 1077910	
DN 40	NPT 1 1/2	(6) 1077912	
DN 50	NPT 2	(4) 1077916	

Article	kvs	Packing unit	Article-No.	Hint
"Optibal" High temperature ball valves PN 16 brass, nickel plated, reduced flow, extended plastic handle (anthracite)				Application: Pipe fitting for central heating and cooling systems. Max. operating pressure p_s : 16 bar (PN 16) Operating temperature t_s : -10 °C up to +150°C, for short periods up to +180 °C; with press connection max. +120 °C, for short periods up to +150 °C
both ports female thread				
	DN 20 Rp 3/4	9.50	(10) 1078706	Attention: Prevent formation of ice as it can destroy the pipework and valve. Press connection: For the direct connection of copper pipes according to DIN EN 1057 / DVGW GW 392, stainless steel pipes according to DIN EN 10088 / DVGW GW 541 and thin-walled C-steel pipe (material no. E 195/1.0034) according to DIN EN 10305-3. Pressing must be carried out to tighten the connection. Only use press jaws with the original contours SANHA (SA), Geberit-Mapress (MM) or Viega (Profipress) in corresponding size. Processing must be carried out according to the installation instructions.
	DN 25 Rp 1	17.00	(10) 1078708	
	DN 32 Rp 1 1/4	35.00	(5) 1078710	
both ports press connection				
	DN 20 Ø 22 mm		(10) 1078760	
	DN 25 Ø 28 mm		(10) 1078761	
	DN 32 Ø 35 mm		(5) 1078762	
Accessories				
Stem seal for replacement purposes (set of 5 pieces) (not suitable for valves with marking "HT")				
	DN 20		1078790°	
	DN 25 / 32		1078791°	
Thermometer conversion set, anthracite				
	for item no.:	(10)	1078382	
	1078171/ 72/ 73, 1078371/ 72/ 73, 1078708/ 10/ 61/ 62 and 4208806/ 08, 4208854/ 55, 4208906/ 08			

2.2

Article	Packing unit	Article-No.	Hint
---------	--------------	-------------	------

"Optibal" High pressure ball valves PN 40
bronze, unplated, full flow

Application:
Pipe fitting for central heating (especially for district heating) and cooling systems.

one port with weldable steel tailpipe,
one port with cap,
extended plastic handle (anthracite)

Max. operating pressure p_s : 40 bar at 150 °C (PN 40)
Operating temperature t_s : 2 °C up to 150 °C (with plastic handle up to 120 °C)



DN 15	(5)	1066604
DN 20	(5)	1066606
DN 25	(5)	1066608
DN 32	(5)	1066610

one port with weldable steel tailpipe,
one port with cap,
aluminium lever



DN 15		1066504
DN 20		1066506
DN 25		1066508
DN 32		1066510

both ports with weldable steel tailpipe,
extended plastic handle (anthracite)



DN 15	(5)	1065604
DN 20	(5)	1065606
DN 25	(5)	1065608
DN 32	(5)	1065610

both ports with weldable steel tailpipe,
aluminium lever



DN 15		1065504
DN 20		1065506
DN 25		1065508
DN 32		1065510

Accessories

Cap with washer and chain

For item no. 10650/51/55/56.. and 10660/61/65/66 ..



DN 15	(25)	1066904
DN 20	(25)	1066906
DN 25	(25)	1066908
DN 32	(25)	1066910

G 3/4 female thread
G 1 female thread
G 1 1/4 female thread
G 1 1/2 female thread



2.2.b "Hygate" Gate valves

Content

"Hygate ATB" Gate valves PN 25	390
"Hygate ATR" Gate valves PN 25	390
"Hygate AFC" Flanged gate valves PN 16	391
"Hygate AFC" Flanged gate valves PN 10	391

2.2

Article	kvs	Packing unit	Article-No.	Hint
---------	-----	--------------	-------------	------

"Hygate ATB" Gate valves PN 25
 (with isolating facility, threaded connection, brass)



Standard model

DN 10	10.00	(50)	1040003
DN 15	11.00	(50)	1040004
DN 20	34.00	(50)	1040006
DN 25	46.00	(25)	1040008
DN 32	60.00	(25)	1040010
DN 40	105.00	(10)	1040012
DN 50	170.00	(5)	1040016
DN 65	280.00	(5)	1040020
DN 80	420.00	(2)	1040024
DN 100	650.00	(2)	1040032

Application:
 Central heating and cooling systems with closed circuits and industrial plants, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).
 Material resistant to: mineral, heating and hydraulic oils

Max. operating pressure p_s : 25 bar (PN 25)
 Operating temperature t_s : -10 °C up to +120 °C
 (The valid rules and standards for the use of these media may restrict the temperature range. Not suitable for gaseous fluids group 1 according to directive 2014/68/EU).

Body, bonnet, wedge and non-rising stem made of brass, with re-adjustable gland packing made of material containing PTFE.

"Hygate ATR" Gate valves PN 25
 (with isolating facility, threaded connection, bronze)



DN 10	10.00	(50)	1043003
DN 15	11.00	(50)	1043004
DN 20	34.00	(50)	1043006
DN 25	46.00	(25)	1043008
DN 32	60.00	(20)	1043010
DN 40	105.00	(10)	1043012
DN 50	170.00	(5)	1043016
DN 65	280.00	(5)	1043020
DN 80	420.00	(2)	1043024

Application:
 Central heating and cooling systems with closed circuits and industrial plants, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).
 Material resistant to: mineral, heating and hydraulic oils, fuels, water vapour as well as air and other harmless and non-aggressive gases (not for gaseous fluids group 1 according to directive 2014/68/EU)

Max. operating pressure p_s : 25 bar (PN 25)
 Operating temperature t_s :
 -10 °C up to +200 °C for water
 (0 °C up to 150 °C for water vapour)
 (The valid rules and standards for the use of these media may restrict the temperature range.)

Body, bonnet and wedge made of bronze, non-rising stem made of brass resistant to dezincification, with re-adjustable gland packing made of material containing PTFE, brass gland nut.

Article	kvs	Article-No.	Hint
---------	-----	-------------	------



"Hygate AFC" Flanged gate valves PN 16
 (with isolating facility, flanged connection, cast iron)

DN 40	107.00	1045049
DN 50	250.00	1045050
DN 65	430.00	1045051
DN 80	790.00	1045052
DN 100	1,250.00	1045053
DN 125	1,960.00	1045054
DN 150	2,790.00	1045055
DN 200	2,880.00	1045056
DN 250	4,306.00	1045057
DN 300	6,380.00	1045058

Application:
 Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).

Max. operating pressure p_s : 16 bar (PN 16)
 Operating temperature t_s : -10 °C up to +120 °C
 Body, bonnet and stuffing box assembly made of cast iron (EN-GJL-250 DIN EN1561), stem and valve seat made of brass, asbestos free seal.
 Round flanges according to DIN EN 1092-2, PN 16.

Lengths according to EN 558-1, basic series 15



"Hygate AFC" Flanged gate valves PN 10
 (with isolating facility, flanged connection, cast iron)

DN 40	120.00	1045149
DN 50	270.00	1045150
DN 65	470.00	1045151
DN 80	900.00	1045152
DN 100	1,600.00	1045153
DN 125	2,150.00	1045154
DN 150	3,680.00	1045155
DN 200		1045156
DN 250		1045157
DN 300		1045158

Application:
 Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).

Max. operating pressure p_s : 10 bar (PN 10)
 Operating temperature t_s : -10 °C up to +120 °C
 Body, bonnet and stuffing box assembly made of cast iron (EN-GJL-250 DIN EN1561), stem and valve seat made of brass, asbestos free seal.
 Round flanges according to DIN EN 1092-2, PN 10.

Lengths according to EN 558-1, basic series 14



2.2.c Valves PN 16/25

Content

Oblique pattern globe valves with position indicator PN 25	394
Straight pattern globe valves with position indicator PN 25	394
Oblique pattern globe valves PN 25	394
Oblique pattern drain valves PN 25	394
Lockshield spindles	395
Airvent PN 25	395
Accessories	395

Article	kvs	Packing unit	Article-No.	Hint
---------	-----	--------------	-------------	------

Oblique pattern globe valves with position indicator PN 25

with plastic handwheel, bronze
bonnet and stem with maintenance-free O-ring seal,
additional sealing when stem is fully opened,
setting indicator "valve fully opened", seat with PTFE seal,
materials suitable for potable water

without draining facility



DN 10	3.10	(10)	1050203
DN 15	4.40	(10)	1050204
DN 20	9.50	(10)	1050206
DN 25	17.40	(10)	1050208
DN 32	29.20	(5)	1050210
DN 40	42.90	(5)	1050212
DN 50	64.00	(5)	1050216

with draining facility (level with the handwheel)



DN 10	3.10	(10)	1050303
DN 15	4.40	(10)	1050304
DN 20	9.50	(10)	1050306
DN 25	17.40	(10)	1050308
DN 32	29.20	(5)	1050310
DN 40	42.90	(5)	1050312
DN 50	64.00	(5)	1050316

Straight pattern globe valves with position indicator PN 25

with plastic handwheel, bronze
length according to DIN 3844, series 2
bonnet and stem with maintenance-free O-ring seal,
additional sealing when stem is fully opened,
setting indicator "valve fully opened", seat with PTFE seal,
materials suitable for potable water

without draining facility



DN 8	1.45	(10)	1052102
DN 10	2.10	(10)	1052103
DN 15	3.70	(10)	1052104
DN 20	6.40	(10)	1052106
DN 25	9.80	(10)	1052108
DN 32	15.80	(5)	1052110
DN 40	22.50	(5)	1052112
DN 50	32.60	(5)	1052116

Oblique pattern globe valves PN 25

bronze
both ports with weldable steel tailpipes,
with PTFE seal

with handwheel



DN 15			1065004
DN 20			1065006
DN 25			1065008
DN 32			1065010

Oblique pattern drain valves PN 25

bronze
one port with weldable steel tailpipe,
one port with cap

with handwheel



DN 15			1066004
DN 20			1066006
DN 25			1066008
DN 32			1066010

Application:

Item no. 10502/03/21...

Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195), as well as installations with open circuits which are operated with water.

Max. operating pressure p_s : 25 bar (PN 25)

Operating temperature t_s : -10 °C up to +150 °C

Bronze body, brass bonnet.

The oblique pattern globe valves

DN 10 - DN 20 are suitable for use with

compression fittings, item no. 10271..,

page 315.






Application:

Central heating and cooling systems with closed circuits (especially for district heating and transmission units), for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035, ÖNORM 5195 and FW510).

Max. operating pressure p_s : 25 bar (PN 25)

Operating temperature t_s : 0 °C up to 150 °C

Bonnet secured against accidental release.

Article	Packing unit	Article-No.	Hint
Lockshield spindles for oblique pattern valves and airvent PN 25			Lockshield spindle as replacement for oblique pattern valves and airvent PN 25.
	DN 15	(5) 1069292	
	DN 20	(5) 1069293	
	DN 25	(5) 1069294	
	DN 32	(5) 1069295	
Airvent PN 25 steel			
	DN 15	(25) 1067004	
Accessories			
Cap with washer and chain			For item no. 10650/51/55/56.. and 10660/61/65/66 ..
	DN 15	(25) 1066904	G 3/4 female thread
	DN 20	(25) 1066906	G 1 female thread
	DN 25	(25) 1066908	G 1 1/4 female thread
	DN 32	(25) 1066910	G 1 1/2 female thread
Washer for item no. 10650.., 10651.., 10660.., 10661..			
	DN 15	(10) 1065904	
	DN 20	(10) 1065906	
	DN 25	(10) 1065908	
	DN 32	(10) 1065910	
	General purpose lockshield key	(10) 1066151	



2.2.d Butterfly valves

Content

Lugged butterfly valves PN 16	398
Wafer butterfly valves PN 16	398
Accessories	399

Article	Article-No.	Hint
---------	-------------	------

Lugged butterfly valves PN 16 with EPDM liner

Body: EN-GJS-400-15 (GGG-40) nodular cast iron
Stem: AISI420 (X20Cr13) stainless steel
Flap: AISI316 (CF8M) stainless steel



Lugged pattern, lever operated

DN 50	1048450
DN 65	1048451
DN 80	1048452
DN 100	1048453
DN 125	1048454
DN 150	1048455
DN 200	1048456

Application:
Central heating and cooling systems and industrial plants with closed circuits, for operation with non-aggressive, harmless fluids (e.g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).

Lugged pattern butterfly valves (DN 50 up to DN 600) for installation between two flanges according to DIN EN 1092-2 (PN 10 or PN 16 for DN 50 up to DN 150; DN 200 up to DN 600 only for PN 16).

Max. operating pressure p_s : 16 bar (PN 16)
Operating temperature t_s : -10 °C up to +120 °C

Extended neck for insulation purposes.

Item no. 10492...: Larger dimensions on demand.



Lugged pattern, gear operated

DN 100	1049253
DN 125	1049254
DN 150	1049255
DN 200	1049256
DN 250	1049257
DN 300	1049258
DN 350	1049259
DN 400	1049260
DN 450	1049261
DN 500	1049262
DN 600	1049263

Wafer butterfly valves PN 16 with EPDM liner

Body: EN-GJS-400-15 (GGG-40) nodular cast iron
Stem: AISI420 (X20Cr13) stainless steel
Flap: AISI316 (CF8M) stainless steel



Wafer pattern, lever operated

DN 50	1046450
DN 65	1046451
DN 80	1046452
DN 100	1046453
DN 125	1046454
DN 150	1046455
DN 200	1046456

Application:
Central heating and cooling systems and industrial plants with closed circuits, for operation with non-aggressive, harmless fluids (e.g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).

Wafer pattern butterfly valves (DN 50 up to DN 300) for installation between two flanges according to DIN EN 1092-2 (PN 6, PN 10 or PN 16).

Max. operating pressure p_s : 16 bar (PN 16)
Operating temperature t_s : -10 °C up to +120 °C

Extended neck for insulation purposes.



Wafer pattern, gear operated

DN 100	1047253
DN 125	1047254
DN 150	1047255
DN 200	1047256
DN 250	1047257
DN 300	1047258

Article	Article-No.	Hint
---------	-------------	------

Accessories



Lever handles

for butterfly valves, item no. 10484.. and 10464..

DN 50 - DN 80	1048491
DN 100 - DN 150	1048492
DN 200	1048493



Gear operators

for butterfly valves item no. 10484.., 10492.., 10464.. and 10472...

DN 50 - DN 100	1049850
DN 125 - DN 200	1049853

2.2.e Piston type spring assisted check valves, swing type check valves

Content



Piston type spring assisted check valves (female threaded model) PN 25	402
Swing type check valves (female threaded model) PN 16	402
Swing type check valves (flanged model) PN 16	403
Swing type check valves (wafer model) PN 16	403
Double swing type check valves (wafer model) PN 16	403

Article	kvs	Packing unit	Article-No.	Hint
---------	-----	--------------	-------------	------

Piston type spring assisted check valves (female threaded model) PN 25

bronze, brass
with FKM seal



DN 10	2.50	(10)	1072003
DN 15	3.80	(10)	1072004
DN 20	6.00	(10)	1072006
DN 25	13.00	(10)	1072008
DN 32	17.00	(5)	1072010
DN 40	19.00	(5)	1072012
DN 50	30.50	(5)	1072016

Non-return check valve for horizontal and vertical installation.
Bronze body, inner parts made of brass.
Valve disc spring assisted.
Opening pressure 40 mbar (~400 mm WG).
Sizes DN 10 - DN 20 are suitable for use with compression fittings, item no. 10271..., page 315.

Application:
Central heating and cooling systems with closed circuits and industrial plants, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).
Material resistant to: mineral, heating and hydraulic oils, fuels, air
(The valid rules and standards for the use of these media may restrict the temperature range. Not suitable for gaseous fluids group 1 according to directive 2014/68/EU).

Max. operating pressure p_s : 25 bar (PN 25)
[6 bar (PN 25) for air]
Operating temperature t_s : 0 up to 100°C
[-10 °C up to +120 °C for water]

Piston type spring assisted check valves (female threaded model) PN 25

bronze, brass
with EPDM seal,
materials suitable for potable water



DN 10	3.40	(10)	1072103
DN 15	5.50	(10)	1072104
DN 20	10.30	(10)	1072106
DN 25	17.50	(10)	1072108
DN 32	33.00	(5)	1072110
DN 40	44.00	(5)	1072112
DN 50	68.00	(5)	1072116

Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195), as well as systems with open circuits which are operated with water.

Max. operating pressure p_s : 25 bar (PN 25)
Operating temperature t_s : -10 °C up to +150 °C
WRAS certified

Swing type check valves (female threaded model) PN 16

bronze, brass
with metal to metal seal



DN 15	5.50	(10)	1075004
DN 20	10.20	(10)	1075006
DN 25	20.20	(10)	1075008
DN 32	34.70	(5)	1075010
DN 40	44.90	(5)	1075012
DN 50	104.40		1075016
DN 65	175.00		1075020

Application:
Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).

Max. operating pressure p_s : 16 bar (PN 16)
Operating temperature t_s : -10 °C up to +80 °C
[80 °C up to 120 °C: max. p_s 10 bar]

Non-return check valve for horizontal and vertical (riser, flap opening upwards) installation.
Bronze body, inner parts made of brass.

Article	kvs	Article-No.	Hint
Swing type check valves (flanged model) PN 16 cast iron			<p>Application: Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).</p> <p>Max. operating pressure p_s: 16 bar (PN 16) Operating temperature t_s: -10 °C up to +120 °C</p> <p>Non-return check valve for horizontal and vertical (riser, flap opening upwards) installation.</p> <p>Body, cover and stuffing box assembly made of cast iron (EN-GJL-250 DIN EN1561), valve seat made of brass, asbestos free gaskets. Round flanges according to DIN EN 1092-2, PN 16.</p>
DN 40	85.00	1073049	
DN 50	132.00	1073050	
DN 65	326.00	1073051	
DN 80	490.00	1073052	
DN 100	770.00	1073053	
DN 125	1,020.00	1073054	
DN 150	1,700.00	1073055	
DN 200	2,410.00	1073056	
DN 250	3,870.00	1073057	
DN 300	5,670.00	1073058	
Swing type check valves (wafer model) PN 16 steel with EPDM seal			<p>Application: Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).</p> <p>Max. operating pressure p_s: 16 bar (PN 16) Operating temperature t_s: -10 °C up to +120 °C</p> <p>Body and flap made of galvanised steel. Suitable for 3 m/s velocity.</p>
DN 40	22.20	1072549	
DN 50	54.00	1072550	
DN 65	75.00	1072551	
DN 80	112.00	1072552	
DN 100	172.00	1072553	
DN 125	342.00	1072554	
DN 150	490.00	1072555	
DN 200	1,128.00	1072556	
DN 250	1,500.00	1072557	
DN 300	1,850.00	1072558	
DN 350	2,700.00	1072559	
DN 400	3,500.00	1072560	
DN 450	5,200.00	1072561	
Double swing type check valves (wafer model) PN 16 cast iron seat seal made of EPDM			<p>Application: Central heating and cooling systems with closed circuits, for operation with non-aggressive, harmless fluids (e. g. water or suitable water and glycol mixtures according to VDI 2035/ÖNORM 5195).</p> <p>Max. operating pressure p_s: 16 bar (PN 16) Operating temperature t_s: 0 °C up to 120 °C</p> <p>Body made of cast iron (EN-GJL-250 DIN EN 1561), stainless steel flaps.</p>
DN 50	55.00	1072650	
DN 65	82.00	1072651	
DN 80	115.00	1072652	
DN 100	236.00	1072653	
DN 125	500.00	1072654	
DN 150	700.00	1072655	
DN 200	1,100.00	1072656	
DN 250	2,000.00	1072657	
DN 300	3,300.00	1072658	
DN 350	3,950.00	1072659	
DN 400	5,000.00	1072660	
DN 450	6,550.00	1072661	
DN 500	8,250.00	1072662	
DN 600	12,600.00	1072663	



2.2

2.2.f Spare parts

Content



Handwheels

406

Article	Packing unit	Article-No.	Hint
---------	--------------	-------------	------

Handwheels

red, for gate valves 10400/30.. and bronze valves 10520..



DN 10 + DN 15	(100)	1900051	
DN 25	(100)	1900052	
DN 32 + DN 40	(100)	1900053	
DN 50	(100)	1900054	
DN 65	(100)	1900055	
DN 80 + DN 100	(100)	1900056	

As for bronze valves, item no. 1900051 fits the sizes DN 10 and DN 15 and item no. 1900052 fits the sizes DN 20 and DN 25.