

TA-FUS10N-C



Combined control & balancing valves

With independent EQM characteristics



Engineering
GREAT Solutions

TA-FUS1ON-C

These innovative balancing and control valves for heating and cooling systems combine the key hydronic functions of balancing and control in one valve. Adjustable Kvs and inherent independent EQM characteristics allow correct valve sizing and optimum system controllability. The measuring points enable accurate measurement of flow, differential pressure, temperature and available differential pressure.

Key features

- > **Adjustable Kvs**
Allows correct Kvs setting corresponding to system requirements.
- > **Self-sealing measuring points**
Simple and accurate measurement for balancing, trouble shooting and power measurement.
- > **Independent, inherent EQM characteristic**
Proper EQM valve characteristic for all settings.
- > **Actuators**
Valves and actuators supplied together ensuring optimum control performance and simplified selection.



Technical description – Valve

Application:

Heating and cooling systems.

Functions:

Control (EQM)
Balancing
Pre-setting (Kvs)
Measuring (ΔpV , ΔH , T, q)
Shut-off (for isolation during system maintenance)

Dimension:

DN 32-150

Pressure class:

DN 32-50: PN 16
DN 65-150: PN 16 and PN 25

Max. differential pressure (ΔpV_{max}):

400 kPa = 4 bar
 ΔpV_{max} = The maximum allowed pressure drop over the valve, to fulfill all stated performances.

Recommended setting range (Kv_{max}):

DN 32: 2,68 - 12,9
DN 40: 3,03 - 18,5
DN 50: 8,03 - 33,0
DN 65-2: 24,3 - 64,3
DN 80-2: 38,1 - 100
DN 100: 57,4 - 160
DN 125: 97,4 - 270
DN 150: 146 - 400
 $Kv_{max} = m^3/h$ at a pressure drop of 1 bar at each setting and fully open valve plug.

Lift:

20 mm

Rangeability:

>100 (for all recommended settings)

Leakage rate:

Tight sealing

Characteristics:

Independent EQM.

Temperature:

Max. working temperature: 120°C
Min. working temperature: -20°C

Media:

Water or neutral fluids, water-glycol mixtures.
(For other media contact IMI Hydronic Engineering.)

Material:

DN 32-50:
Valve body: AMETAL®
Valve plug: AMETAL®
Seat seal: EPDM/Stainless steel
Spindle seal: EPDM O-ring
O-rings: EPDM
Valve insert: AMETAL®/PPS/PTFE
Springs: Stainless steel
Spindle: Stainless steel
DN 65-150:
Valve body: Ductile iron EN-GJS-400
Valve plug: Stainless steel
Seat seal: EPDM/Stainless steel
O-rings: EPDM
Plug mechanism: Stainless steel and brass
Screws and nuts: Stainless steel

AMETAL® is the dezincification resistant alloy of IMI Hydronic Engineering.

Surface treatment:

DN 32-50: Non treated

DN 65-150: Electrophoretic painting.

Marking:

DN 32-50: TAH, IMI, DN, PN, DR, serial No and flow direction arrow.

DN 65-150: TAH, IMI, DN, PN, Kvs, T_{min}/T_{max} , serial number, valve body material and flow direction arrow, label.

CE-marking:

DN 65-125: CE

DN 150: CE 0062 *

*) Notified body.

Connection:

DN 32-50:

Female thread according to ISO 228. Thread length according to ISO 7-1.

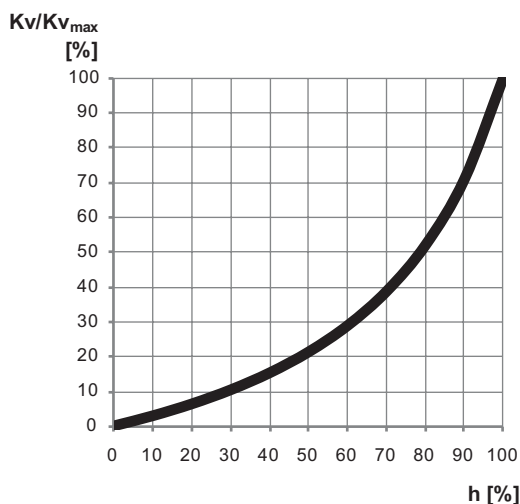
Male thread according to ISO 228.

DN 65-150:

Flanges according to EN-1092-2, type 21. Face to face length according to EN 558 series 3.

Valve characteristics

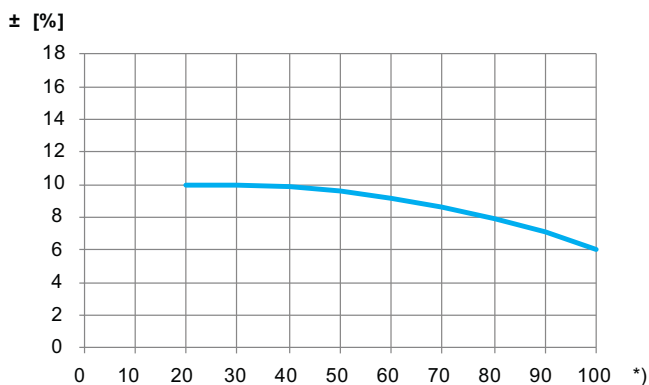
Nominal valve characteristic for all recommended settings.



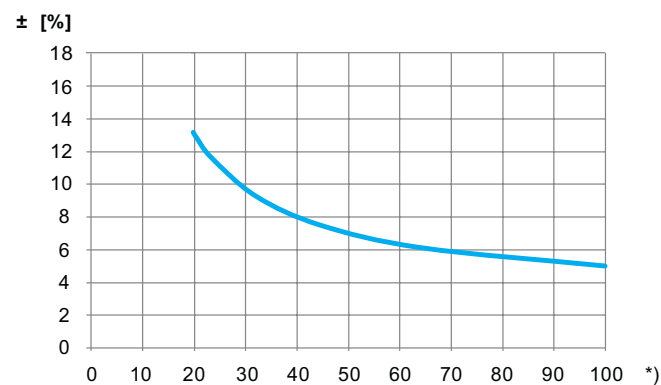
Measuring accuracy

Maximum flow deviation at different settings

DN 32-50



DN 65-150



*) Setting (%) of fully open valve.

Correction factors

The flow calculations are valid for water (+20°C). For other liquids with approximately the same viscosity as water (≤ 20 cSt = 3°E =100S.U.), it is only necessary to compensate for the specific density. However, at low temperatures, the viscosity increases and laminar flow may occur in the valves. This causes

a flow deviation that increases with small valves, low settings and low differential pressures. Correction for this deviation can be made with the software HySelect or directly in our balancing instruments.

Noise

In order to avoid noise in the installation the flows must be correctly balanced and the water de-aerated. Very high differential pressures can cause noise in the installations, and in that case, differential pressure controllers should be used.

The maximum recommended pressure drop in order to avoid excessive noise is 200 kPa.

Actuators

A wide range of high performance proportional actuators are available from IMI Hydronic Engineering (e.g. 24V, 100-240V, 230V, fail safe) to provide accurate modulating or 3-point control, when used together with combined balancing and control valves. See "Selection tables".

For more details on actuators, see separate technical leaflets or contact IMI Hydronic Engineering.

Sizing

When ΔpV and flow are known, use the formula to calculate Kv_{\max} .

$$Kv = 0,01 \frac{q}{\sqrt{\Delta p}} \quad q \text{ l/h, } \Delta p \text{ kPa}$$

$$Kv = 36 \frac{q}{\sqrt{\Delta p}} \quad q \text{ l/s, } \Delta p \text{ kPa}$$

Note

If the required flow falls outside the scale of the diagram, the reading can be made as follows: Use the design ΔpV and draw the line to a flow that is 0,1 or 10 times the design flow, getting Kv_{\max} in the same relation (either 0,1 or 10 times needed).

Following the previous example

35 kPa and 10 m³/h gives $Kv_{\max}=16,9$

35 kPa and 1 m³/h gives $Kv_{\max}=1,69$

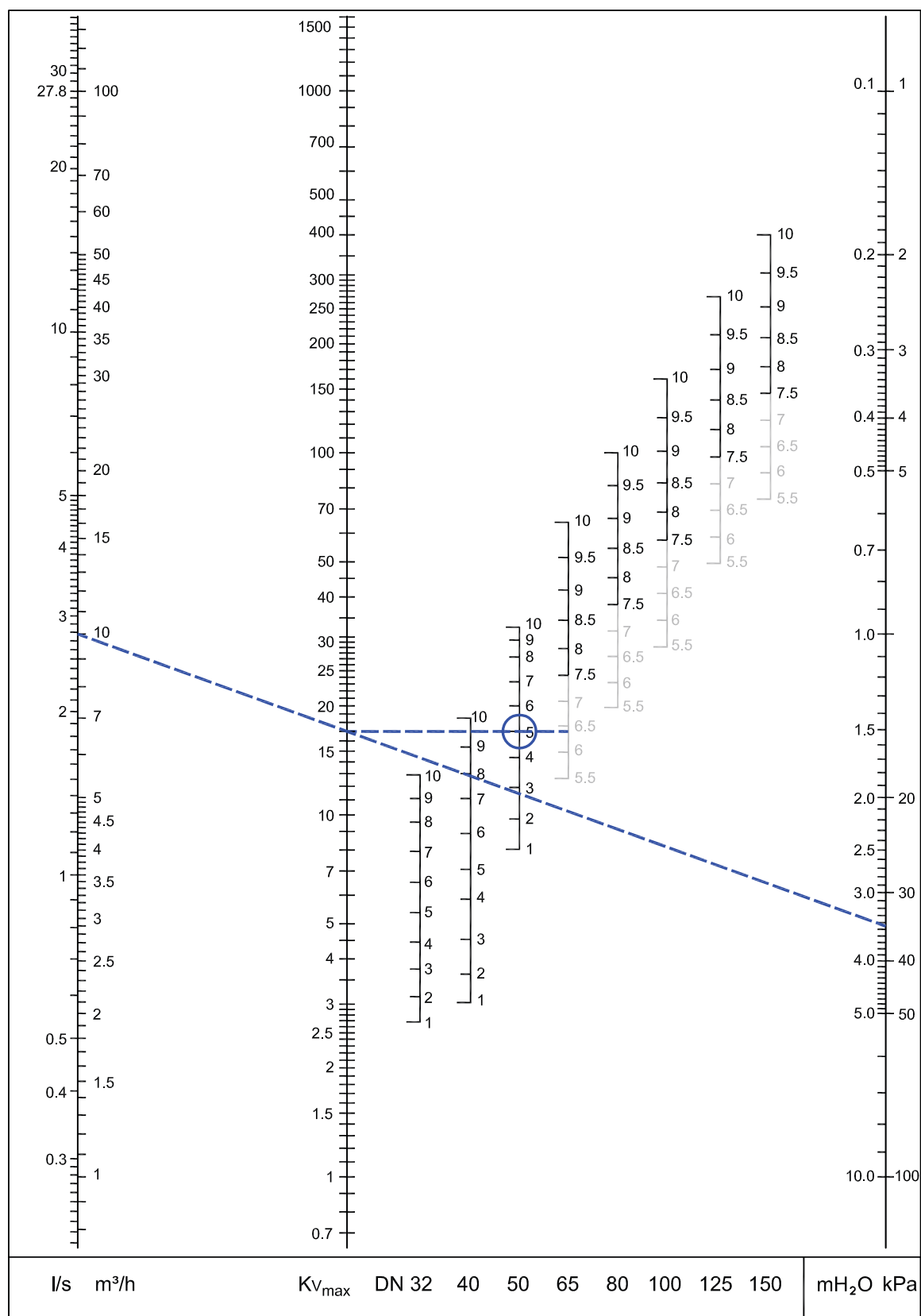
35 kPa and 100 m³/h gives $Kv_{\max}=169$

Example

Flow is 10 m³/h, ΔpV is 35 kPa and control signal (input signal) 0-10 VDC.

1. Go to sizing diagram. (When calculating the Kv_{\max} by the formula go directly to step 4).
2. Draw a straight line between 10 m³/h and 35 kPa.
3. Read the needed Kv_{\max} value where the line crosses the Kv -axis. In this case $Kv_{\max}=16,9$.
4. Draw a horizontal line from Kv_{\max} 16,9, which will cross the setting bars for all valves which fit the application. In this case DN 40 setting 9,5, DN 50 setting 5,0.
5. Choose the smallest option (with some safety margin). In this case DN 50 is preferable.
6. Go to the selection tables to select the correct valve and actuator combination. In this case article number 322205-50911 (24 V).

Sizing diagram



DN 65-150: Recommended setting range 7.5-10 (≈40-100% of Kvs).

Selection tables

Maximum recommended pressure drop (ΔpV) for valve and actuator combination

The maximum recommended pressure drop over the valve and actuator combination for close off (ΔpV_{close}) and to fulfill all stated performances (ΔpV_{max}). For detailed information on maximum closing off pressure, see "Closing force".

ΔpV_{close} = The maximum pressure drop that the valve can close against from an opened position, with a specified force (actuator) without exceeding stated leakage rate.

ΔpV_{max} = The maximum allowed pressure drop over the valve, to fulfill all stated performances.

DN	TA-Slider 750 [kPa]	TA-Slider 1250 [kPa]	TA-MC100 FSE/FSR [kPa]
32	400	–	400
40	400	–	400
50	400	–	400
65	400	–	400
80	400	–	400
100	400	–	400
125	400	–	400
150	200	400	400

The codes in the selection tables are for different sets of valve size (DN) and type of actuator. Valves and actuators supplied together ensures optimum control and simplified selection. For other combinations order valve and actuator separately, see "Articles – Valves" and "Articles – Actuators".

Article number: 322205-xxxxx / 22106-xxxxxx

To get the complete article number, simply add the code stated below according to your required set.

Example: 322205-50711

For more details on actuators, see separate technical leaflets or contact IMI Hydronic Engineering.

With standard actuators

			TA-Slider 750	TA-Slider 750	TA-Slider 1250	TA-Slider 1250
Input signal:			0(2)-10 VDC, 0(4)-20 mA, 3-point, on-off			
Output signal:			0(2)-10 VDC			
Supply voltage:			24 VAC/VDC	100-240 VAC	24 VAC/VDC	100-240 VAC
Fail safe:			No			
DN	PN	Kvs	322205-			
32	16	12,9	50711	50721	–	–
40	16	18,5	50811	50821	–	–
50	16	33,0	50911	50921	–	–
65-2	16	64,3	51011	51021	–	–
65-2	25	64,3	61011	61021	–	–
80-2	16	100	51111	51121	–	–
80-2	25	100	61111	61121	–	–
100	16	160	51211	51221	–	–
100	25	160	61211	61221	–	–
125	16	270	51311	51321	–	–
125	25	270	61311	61321	–	–
150	16	400	–	–	51431	51441
150	25	400	–	–	61431	61441

DN 32-50: Female threaded

DN 65-150: Flanged

With fail safe actuators

			TA-MC100FSE	TA-MC100FSE	TA-MC100FSR	TA-MC100FSR
Input signal:			0(2)-10 VDC, 0(4)-20 mA, 3-point	3-point	0(2)-10 VDC, 0(4)-20 mA, 3-point	3-point
Output signal:			0(2)-10 VDC, 0(4)-20 mA	0-10 VDC	0(2)-10 VDC, 0(4)-20 mA	0-10 VDC
Supply voltage:			24 VAC	230 VAC	24 VAC	230 VAC
Fail safe:			Extending (closing)		Retracting (opening)	
DN	PN	Kvs	22106-			
32	16	12,9	081032	101032	091032	111032
40	16	18,5	081040	101040	091040	111040
50	16	33,0	081050	101050	091050	111050
65-2	16	64,3	082065	102065	092065	112065
65-2	25	64,3	083065	103065	093065	113065
80-2	16	100	082080	102080	092080	112080
80-2	25	100	083080	103080	093080	113080
100	16	160	082100	102100	092100	112100
100	25	160	083100	103100	093100	113100
125	16	270	082125	102125	092125	112125
125	25	270	083125	103125	093125	113125
150	16	400	082150	102150	092150	112150
150	25	400	083150	103150	093150	113150

DN 32-50: Female threaded

DN 65-150: Flanged

Kv_{max} values

	Positions									
	1	2	3	4	5	6	7	8	9	10
DN 32	2,68	3,15	3,75	4,45	5,37	6,51	7,93	9,55	11,1	12,9
DN 40	3,03	3,63	4,53	5,70	7,07	8,88	11,1	13,0	15,4	18,5
DN 50	8,03	9,74	11,9	14,4	17,0	20,0	23,3	27,3	30,4	33,0

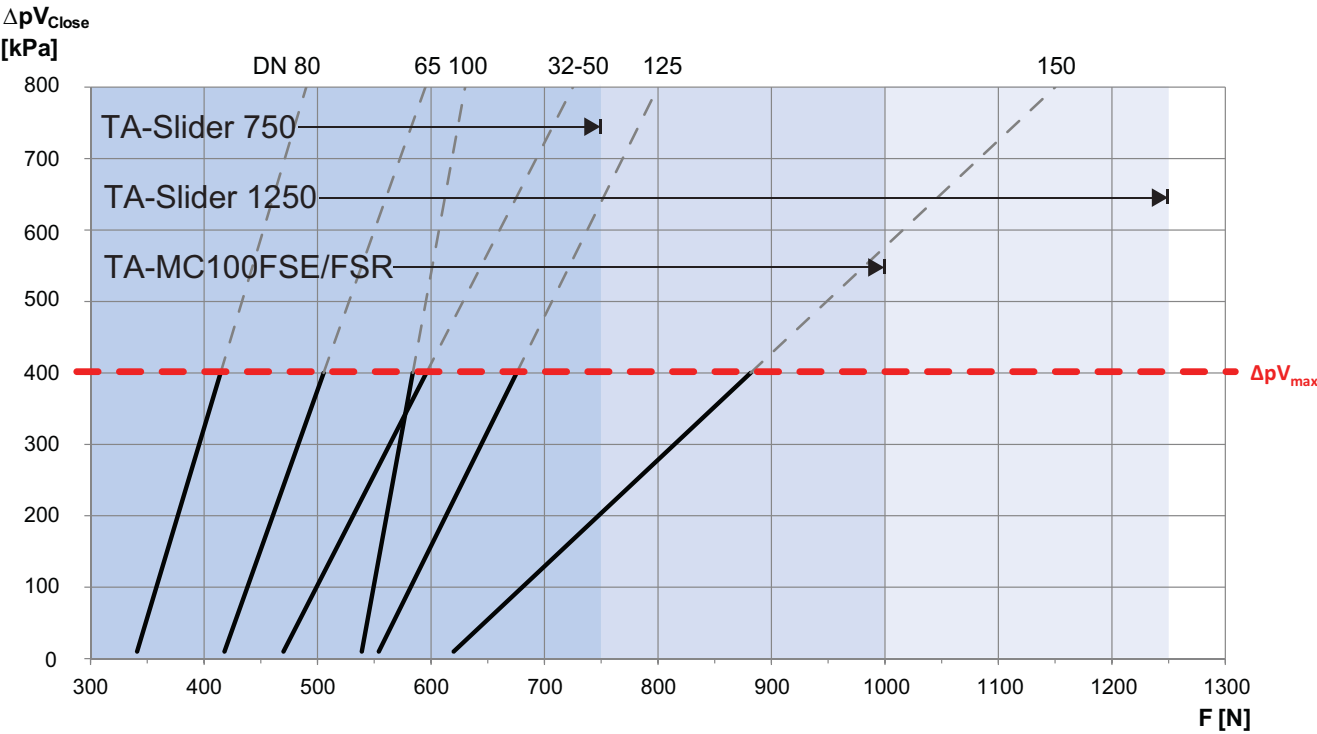
	Positions									
	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
DN 65-2	12,6	14,9	17,6	20,6	24,3	28,8	34,5	41,8	51,4	64,3
DN 80-2	19,8	23,2	27,4	32,2	38,1	45,2	54,5	65,9	81,2	100
DN 100	29,1	34,5	40,9	48,4	57,4	68,6	82,6	101	125	160
DN 125	49,5	58,6	69,4	82,1	97,4	116	140	170	212	270
DN 150	74,5	88,1	104	123	146	173	208	253	314	400

DN 65-150: Recommended setting range 7.5–10 (≈40–100% of Kvs).

$Kv_{max} = m^3/h$ at a pressure drop of 1 bar at each setting and fully open valve plug.

Closing force

Necessary force (F) to close the valve versus the differential pressure (ΔpV_{close}), without exceeding stated leakage rate.



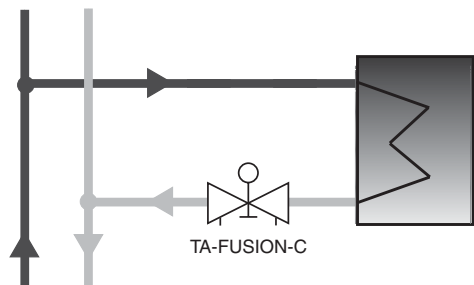
ΔpV_{close} = The maximum pressure drop that the valve can close against from an opened position, with a specified force (actuator) without exceeding stated leakage rate.

ΔpV_{max} = The maximum allowed pressure drop over the valve, to fulfill all stated performances.

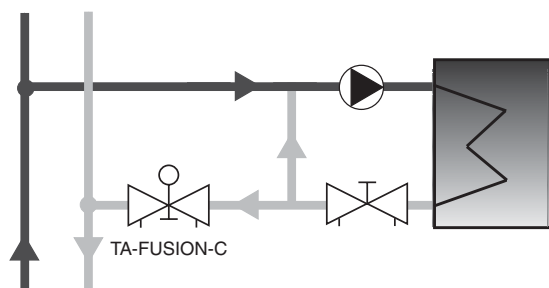
Installation

Application examples

2-way direct circuit



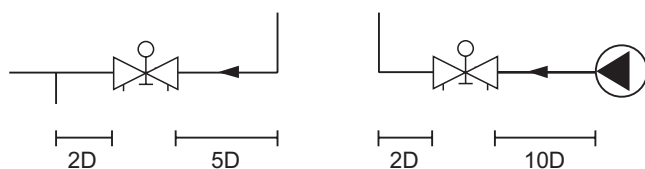
Injection circuit



Normal pipe fittings

Avoid mounting taps and pumps immediately before or after the valve.

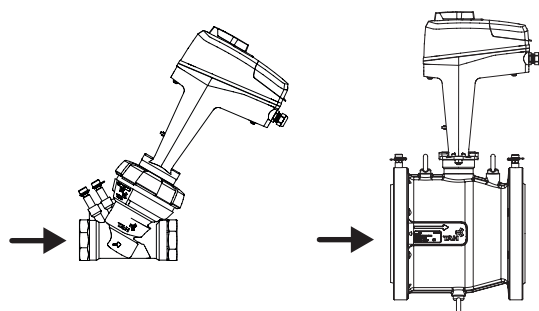
Installation recommendation for accurate measurement due to distortion of fully developed turbulent flow profile.



Flow direction

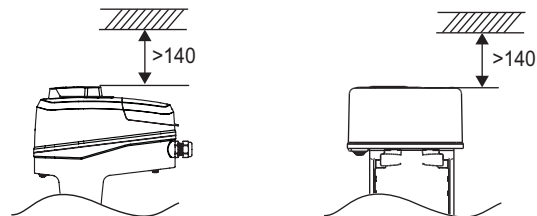
DN 32-50

DN 65-150



Installation of actuator

Approx. 140 mm of free space is required above the actuator.



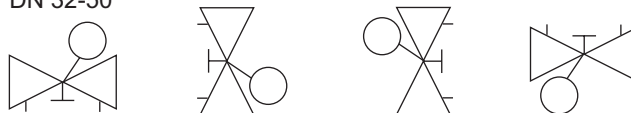
Ingress protection

IP54

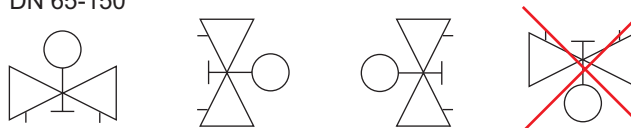
Note: Read carefully the installation instruction of the actuator.

TA-Slider 750/TA-Slider 1250

DN 32-50

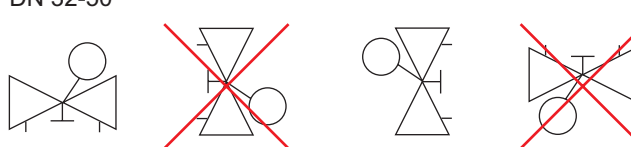


DN 65-150

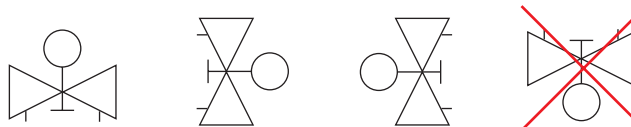


TA-MC100 FSE/FSR

DN 32-50

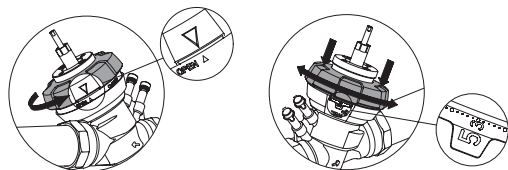


DN 65-150



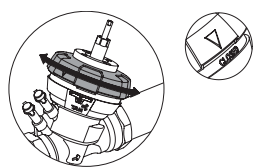
Operating function DN 32-50

Setting



1. Open the valve **fully** with the handwheel.
2. Press the handwheel downwards and turn to desired value, e.g. 5.3.

Shut-off



1. Turn the handwheel to "Closed".

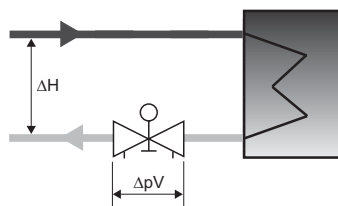
Turn the handwheel to "Open" when re-opening the valve.

Measuring ΔpV and q

Connect IMI Hydronic Engineering balancing instrument to the measuring points. Input the valve type, size and setting and the actual flow is displayed.

Measuring ΔH

Connect IMI Hydronic Engineering balancing instrument to the measuring points. Close the valve according to "Shut-off" and measure. **Important!** The valve must be re-opened **fully** after the measurement is completed.

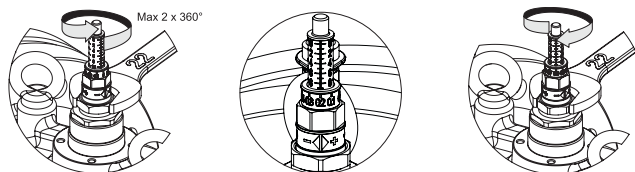


NOTE!

Ensure that the actuator is disengaged from the valve spindle during all operating functions described above.

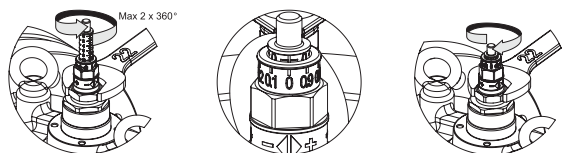
Operating function DN 65-150

Setting



1. Release the fixing nut.
2. Turn the setting screw to desired value on the scale, e.g. 9.2.
3. Tighten the fixing nut.

Shut-off



1. Release the fixing nut.
2. Turn the setting screw clockwise to stop (position 0 ± 0.5).
The presetting is visible on the setting scale.
3. Tighten the fixing nut.

Open to **previous setting** when re-opening the valve.

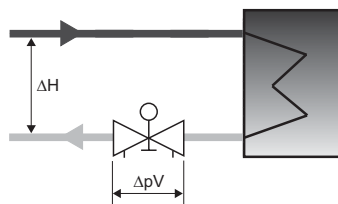
Measuring ΔpV and q

Connect IMI Hydronic Engineering balancing instrument to the measuring points. Input the valve type, size and setting and the actual flow is displayed.

Measuring ΔH

Connect IMI Hydronic Engineering balancing instrument to the measuring points. Close the valve according to "Shut-off" and measure.

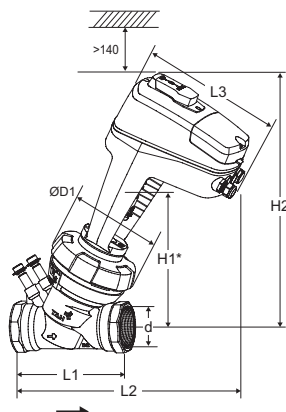
Important! The valve must be re-opened to **previous setting** after the measurement is completed.



NOTE!

Ensure that the actuator is disengaged from the valve spindle during all operating functions described above.

Articles – Sets



DN 32-50 Female threads Threads according to ISO 228

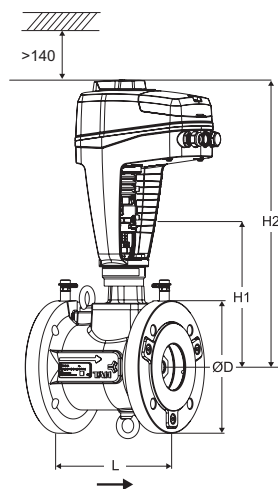
TA-Slider 750 Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point, on-off

24 VAC/VDC

DN	d	D1	L1	L2	L3	H1*	H2	Kvs	Kg	EAN	Article No
PN 16											
32	G1 1/4	128	153	351	209	186	361	12,9	5,1	5902276884603	322205-50711
40	G1 1/2	128	159	351	209	186	361	18,5	5,2	5902276884665	322205-50811
50	G2	128	167	356	209	190	365	33,0	5,7	5902276884726	322205-50911

100-240 VAC

DN	d	D1	L1	L2	L3	H1*	H2	Kvs	Kg	EAN	Article No
PN 16											
32	G1 1/4	128	153	351	209	186	361	12,9	5,1	5902276884634	322205-50721
40	G1 1/2	128	159	351	209	186	361	18,5	5,2	5902276884696	322205-50821
50	G2	128	167	356	209	190	365	33,0	5,7	5902276884757	322205-50921



DN 65-80 With flanges Flanges according to EN-1092-2, type 21.

TA-Slider 750 Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point, on-off

24 VAC/VDC

DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
65-2	185	190	205	401	64,3	19	5902276884788	322205-51011
80-2	200	203	205	401	100	23	5902276884801	322205-51111
PN 25								
65-2	185	190	205	401	64,3	19	5902276884887	322205-61011
80-2	200	203	205	401	100	23	5902276884900	322205-61111

100-240 VAC

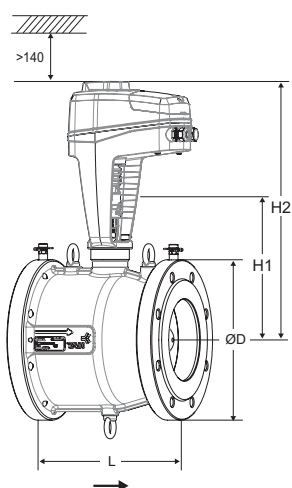
DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
65-2	185	190	205	401	64,3	19	5902276884795	322205-51021
80-2	200	203	205	401	100	23	5902276884818	322205-51121
PN 25								
65-2	185	190	205	401	64,3	19	5902276884894	322205-61021
80-2	200	203	205	401	100	23	5902276884917	322205-61121

*) Height to the spindle top.

→ = Flow direction

For maximum ΔpV_{close} , see “Selection tables”.

Valve and actuator are individually packaged for easy handling on site.



DN 100-150 With flanges Flanges according to EN-1092-2, type 21.

TA-Slider 750 / TA-Slider 1250 (DN 150) Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point, on-off

24 VAC/VDC

DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
100	220	229	221	403	160	29	5902276893193	322205-51211
125	250	254	221	403	270	39	5902276893209	322205-51311
150	285	267	251	420	400	52	5902276884863	322205-51431
PN 25								
100	235	229	221	403	160	29	5902276893216	322205-61211
125	270	254	221	403	270	39	5902276893223	322205-61311
150	300	267	251	420	400	52	5902276893230	322205-61431

100-240 VAC

DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
100	220	229	221	403	160	29	5902276893247	322205-51221
125	250	254	221	403	270	39	5902276893254	322205-51321
150	285	267	251	420	400	52	5902276884870	322205-51441
PN 25								
100	235	229	221	403	160	29	5902276893261	322205-61221
125	270	254	221	403	270	39	5902276893278	322205-61321
150	300	267	251	420	400	52	5902276893285	322205-61441

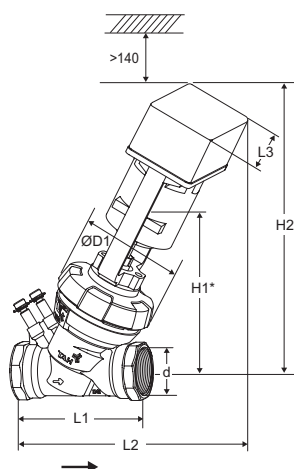
*) Height to the spindle top.

→ = Flow direction

For maximum $\Delta p_{V_{close}}$, see "Selection tables".

Valve and actuator are individually packaged for easy handling on site.

Articles – Fail-safe sets, extending (closing)



DN 32-50 Female threads Threads according to ISO 228

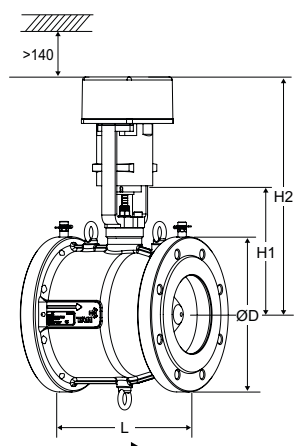
TA-MC100FSE Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point

24 VAC

DN	d	D1	L1	L2	L3	H1*	H2	Kvs	Kg	EAN	Article No
PN 16											
32	G1 1/4	128	153	319	141	186	356	12,9	6,2	5901688820162	22106-081032
40	G1 1/2	128	159	319	141	186	356	18,5	6,3	5901688820209	22106-081040
50	G2	128	167	324	141	190	360	33,0	6,8	5901688820247	22106-081050

230 VAC

DN	d	D1	L1	L2	L3	H1*	H2	Kvs	Kg	EAN	Article No
PN 16											
32	G1 1/4	128	153	319	141	186	356	12,9	6,2	5901688820186	22106-101032
40	G1 1/2	128	159	319	141	186	356	18,5	6,3	5901688820223	22106-101040
50	G2	128	167	324	141	190	360	33,0	6,8	5901688820261	22106-101050



DN 65-150 With flanges Flanges according to EN-1092-2, type 21.

TA-MC100FSE Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point

24 VAC

DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
65-2	185	190	205	382	64,3	20	5901688820629	22106-082065
80-2	200	203	205	382	100	24	5901688820742	22106-082080
100	220	229	221	387	160	30	5901688821046	22106-082100
125	250	254	221	387	270	40	5901688821169	22106-082125
150	285	267	251	407	400	55	5901688823637	22106-082150
PN 25								
65-2	185	190	205	382	64,3	20	5901688820667	22106-083065
80-2	200	203	205	382	100	24	5901688820780	22106-083080
100	235	229	221	387	160	30	5901688821084	22106-083100
125	270	254	221	387	270	40	5901688821206	22106-083125
150	300	267	251	404	400	55	5901688823644	22106-083150

230 VAC

DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
65-2	185	190	205	382	64,3	20	5901688820643	22106-102065
80-2	200	203	205	382	100	24	5901688820766	22106-102080
100	220	229	221	387	160	30	5901688821060	22106-102100
125	250	254	221	387	270	40	5901688821183	22106-102125
150	285	267	251	404	400	55	5901688823675	22106-102150
PN 25								
65-2	185	190	205	382	64,3	20	5901688820681	22106-103065
80-2	200	203	205	382	100	24	5901688820803	22106-103080
100	235	229	221	387	160	30	5901688821107	22106-103100
125	270	254	221	387	270	40	5901688821220	22106-103125
150	300	267	251	404	400	55	5901688823682	22106-103150

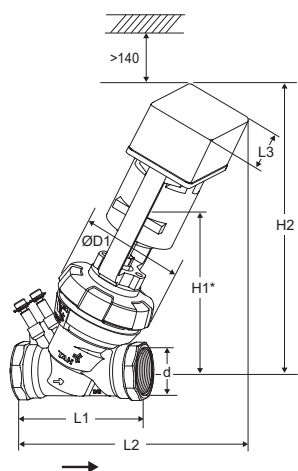
→ = Flow direction

*) Height to the spindle top.

For maximum ΔpV_{close} see "Selection tables".

Valve and actuator are individually packaged for easy handling on site.

Articles – Fail-safe sets, retracting (opening)



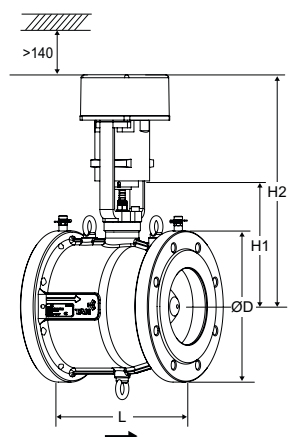
DN 32-50 Female threads Threads according to ISO 228
TA-MC100FSR Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point

24 VAC

DN	d	D1	L1	L2	L3	H1*	H2	Kvs	Kg	EAN	Article No
PN 16											
32	G1 1/4	128	153	319	141	186	356	12,9	6,2	5901688820179	22106-091032
40	G1 1/2	128	159	319	141	186	356	18,5	6,3	5901688820216	22106-091040
50	G2	128	167	324	141	190	360	33,0	6,8	5901688820254	22106-091050

230 VAC

DN	d	D1	L1	L2	L3	H1*	H2	Kvs	Kg	EAN	Article No
PN 16											
32	G1 1/4	128	153	319	141	186	356	12,9	6,2	5901688820193	22106-111032
40	G1 1/2	128	159	319	141	186	356	18,5	6,3	5901688820230	22106-111040
50	G2	128	167	324	141	190	360	33,0	6,8	5901688820278	22106-111050



DN 65-150 With flanges Flanges according to EN-1092-2, type 21.
TA-MC100FSR Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point

24 VAC

DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
65-2	185	190	205	382	64,3	20	5901688820636	22106-092065
80-2	200	203	205	382	100	24	5901688820759	22106-092080
100	220	229	221	387	160	30	5901688821053	22106-092100
125	250	254	221	387	270	40	5901688821176	22106-092125
150	285	267	251	404	400	55	5901688823651	22106-092150
PN 25								
65-2	185	190	205	382	64,3	20	5901688820674	22106-093065
80-2	200	203	205	382	100	24	5901688820797	22106-093080
100	235	229	221	387	160	30	5901688821091	22106-093100
125	270	254	221	387	270	40	5901688821213	22106-093125
150	300	267	251	404	400	55	5901688823668	22106-093150

230 VAC

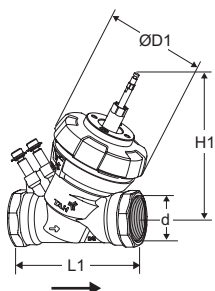
DN	D	L	H1*	H2	Kvs	Kg	EAN	Article No
PN 16								
65-2	185	190	205	382	64,3	20	5901688820650	22106-112065
80-2	200	203	205	382	100	24	5901688820773	22106-112080
100	220	229	221	387	160	30	5901688821077	22106-112100
125	250	254	221	387	270	40	5901688821190	22106-112125
150	285	267	251	404	400	55	5901688823699	22106-112150
PN 25								
65-2	185	190	205	382	64,3	20	5901688820698	22106-113065
80-2	200	203	205	382	100	24	5901688820810	22106-113080
100	235	229	221	387	160	30	5901688821114	22106-113100
125	270	254	221	387	270	40	5901688821237	22106-113125
150	300	267	251	404	400	55	5901688823705	22106-113150

→ = Flow direction

*) Height to the spindle top.

For maximum ΔpV_{close} , see “Selection tables”.

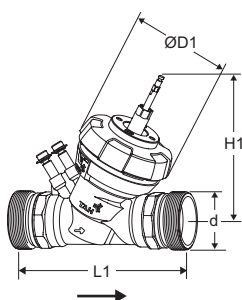
Articles – Valves



Female thread

Threads according to ISO 228

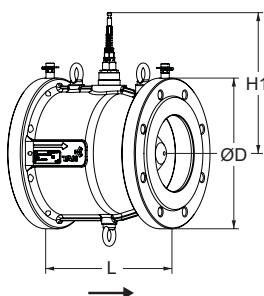
DN	d	D1	L1	H1	Kvs	Kg	EAN	Article No
PN 16								
32	G1 1/4	128	153	186	12,9	3,5	7318798639207	22106-001032
40	G1 1/2	128	159	186	18,5	3,6	7318798639306	22106-001040
50	G2	128	167	190	33,0	4,1	7318798639405	22106-001050



Male thread

Threads according to ISO 228

DN	d	D1	L1	H1	Kvs	Kg	EAN	Article No
PN 16								
32	G1 1/2	128	213	186	12,9	4,1	7318794015906	22106-005032
40	G2	128	221	186	18,5	4,2	7318794016002	22106-005040
50	G2 1/2	128	235	190	33,0	5,1	7318794016101	22106-005050



Flanged

Flanges according to EN-1092-2, type 21.

DN	D	L	H1	Kvs	Kg	EAN	Article No
PN 16							
65-2	185	190	205	64,3	17	5901688827529	22106-002065
80-2	200	203	205	100	21	5901688827550	22106-002080
100	220	229	221	160	27	3831112527881	22106-002100
125	250	254	221	270	37	3831112527911	22106-002125
150	285	267	251	400	50	3831112527942	22106-002150
PN 25							
65-2	185	190	205	64,3	17	5901688827536	22106-003065
80-2	200	203	205	100	21	5901688827567	22106-003080
100	235	229	221	160	27	3831112527898	22106-003100
125	270	254	221	270	37	3831112527928	22106-003125
150	300	267	251	400	50	3831112527959	22106-003150

→ = Flow direction

Articles – Actuators

TA-Slider 750, TA-Slider 1250, TA-MC100FSE/FSR

(Available as sets with TA-FUSION)

For more details on actuators, see separate technical leaflets or contact IMI Hydronic Engineering.

Type	Supply voltage	EAN	Article No
TA-Slider 750	24 VAC/VDC	5901688828458	322226-10110
TA-Slider 750	100-240 VAC	5902276883620	322226-40110
TA-Slider 1250	24 VAC/VDC	5901688828533	322227-10110
TA-Slider 1250	100-240 VAC	5902276883828	322227-40110
TA-MC100FSE	24 VAC	3831112512122	61-100-101
TA-MC100FSE	230 VAC	3831112512139	61-100-102
TA-MC100FSR	24 VAC	3831112512146	61-100-201
TA-MC100FSR	230 VAC	3831112512153	61-100-202

Adapter for actuator to be ordered separately, when valve (DN 65-150) and actuator are ordered separately.

TA-Slider 750 Plus / TA-Slider 1250 Plus

The Plus version has the following additional functions;

- Binay input, relays, output signal in mA
- BUS communication for ModBus, BACnet or KNX (with or without binay input, relays, output signal in mA)

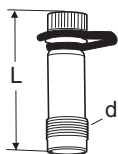
The Plus version of the TA-Slider actuators to be ordered separately. See separate technical leaflets TA-Slider 750 and TA-Slider 1250.

Adapters for actuators

	Valve DN	EAN	Article No
For recommended actuators			
TA-Slider 750	32-50		*)
TA-Slider 750/1250	65-150	3831112529748	22413-001055
TA-MC100FSE/FSR	32-50		*)
TA-MC100FSE/FSR	65-150	3831112529748	22413-001055
For other actuators			
JC VA1125-GGA-1	32-50	3831112531635	22412-000001
JC VA1125-GGA-1	65-150	3831112531628	22413-000001
JC VA7810-GGA-12	32-50	3831112531642	22412-000002
JC VA7810-GGA-12	65-150	3831112531659	22413-000002
Sauter AVM322	32-50	3831112532342	22412-000004
Sauter AVM322	65-150	3831112532359	22413-000004
Sauter AVM234, AVN, AVF	32-50	3831112531680	22412-000003
Sauter AVM234, AVN, AVF	65-150	3831112512214	22413-000003
Siemens SAX, SQV91	32-50	3831112531611	22214-000002
Siemens SAX, SQV91	65-150	3831112530928	22214-000001

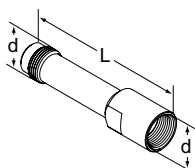
*) Integrated in the valve.

Accessories



Measuring point

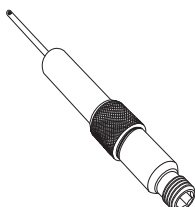
d	L	EAN	Article No
DN 32-50			
M14x1	44	7318792813207	52 179-014
M14x1	103	7318793858108	52 179-015
DN 65-150			
3/8	47	7318792813009	52 179-008
3/8	103	7318792814501	52 179-608



Extension for measuring point M14x1

Suitable when insulation is used.
For DN 32-50.

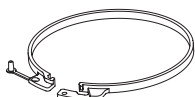
d	L	EAN	Article No
M14x1	71	7318793969507	52 179-016



Measuring point

Extensions 60 mm.
Can be installed without draining of the system.
For all dimensions.

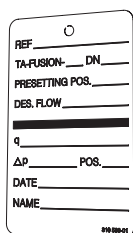
L	EAN	Article No
60	7318792812804	52 179-006



Tamper proof ring

For locking of set Kv_{max} .

For DN	EAN	Article No
32-50	7318794001800	22107-000001



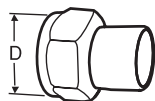
Identification tag

EAN	Article No
7318794001701	22107-000002

Insulation

See related insulation instruction under "Products & Solutions" on www.imi-hydronic.com or contact IMI Hydronic Engineering.

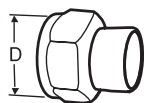
Connections for DN 32-50



Welding connection

Swivelling nut
Max 120°C

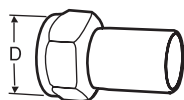
Valve DN	D	Pipe DN	EAN	Article No
32	G1 1/2	32	7318792748806	52 009-032
40	G2	40	7318792748905	52 009-040
50	G2 1/2	50	7318792749001	52 009-050



Soldering connection

Swivelling nut
Max 120°C

Valve DN	D	Pipe Ø	EAN	Article No
32	G1 1/2	35	7318792749803	52 009-535
40	G2	42	7318792749902	52 009-542
50	G2 1/2	54	7318792750007	52 009-554



Connection with smooth end

For connection with press coupling
Swivelling nut
Max 120°C

Valve DN	D	Pipe Ø	EAN	Article No
32	G1 1/2	35	7318793811004	52 009-335
40	G2	42	7318793811103	52 009-342
50	G2 1/2	54	7318793811202	52 009-354

