

TA-FUSION-P



Combined control & balancing valves

Pressure independent combined balancing and control valves with independent EQM characteristics

*Engineering
GREAT Solutions*

TA-FUS10N-P

These innovative pressure independent balancing and control valves for heating and cooling systems combine the key hydronic functions of balancing and control in one valve. Adjustable max. flow 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 max. flow**
Adjustable Kvs technology allows setting to design flow.
- > **Independent, inherent EQM characteristic**
Proper EQM valve characteristic and high authority for all settings.
- > **Self-sealing measuring points**
Simple and accurate measurement for balancing, trouble shooting and power measurement.
- > **Actuators**
Valves and actuators supplied together ensuring optimum control performance and simplified selection.

Technical description – Valve

Application:

Heating and cooling systems.

Functions:

Control (EQM)
Differential pressure control
Pre-setting (max. flow)
Measuring (ΔH , T, q)
Shut-off (for isolation during system maintenance)
Flushing (of the system)

Dimension:

DN 32-150

Pressure class:

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

Differential pressure (ΔpV):

Max. differential pressure (ΔpV_{max}):
800 kPa = 8 bar
Min. differential pressure (ΔpV_{min}):
DN 32-50: 15 kPa = 0,15 bar
DN 65-80: 25 kPa = 0,25 bar
DN 100-125: 30 kPa = 0,30 bar
DN 150: 40 kPa = 0,40 bar
(Valid for position 10, fully open. Other positions will require lower differential pressure, check with the software HySelect.)
 ΔpV_{max} = The maximum allowed pressure drop over the valve, to fulfill all stated performances.
 ΔpV_{min} = The minimum recommended pressure drop over the valve, for proper differential pressure control.

Recommended flow range:

The flow (q_{max}) can be set within the range [m^3/h]:
DN 32: 0,88 - 4,21
DN 40: 1,01 - 6,19
DN 50: 2,71 - 11,1
DN 65-2: 9,40 - 24,2
DN 80-2: 13,6 - 36,8
DN 100: 27,8 - 68,0
DN 125: 45,6 - 120
DN 150: 78,1 - 207
 q_{max} = m^3/h 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:

DN 32-150: 120°C

DN 65-150 with double secured measuring points: 150°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

Δp insert: Stainless steel/PPS

Membrane: HNBR

Springs: Stainless steel

Spindle: Stainless steel

DN 65-150:

Valve body: Ductile iron EN-GJS-400

O-rings: EPDM

Valve plug: Stainless steel

Seat seals: EPDM/Stainless steel

Plug mechanisms: Stainless steel and brass

Membrane: EPDM

Δp spring: Stainless steel. DN 150

painted steel.

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, $T_{min}/_{max}$, 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.

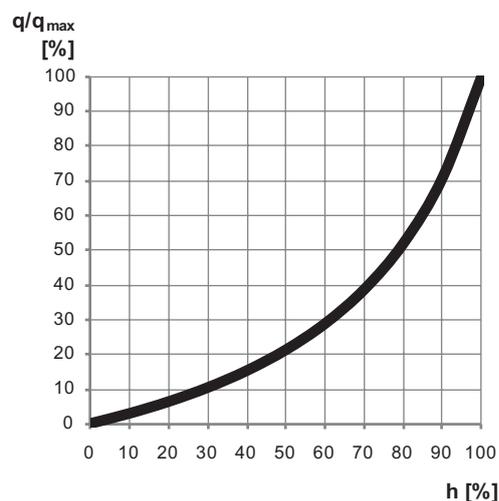
DN 65-150:

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

Face to face length according to EN 558 series 1.

Valve characteristics

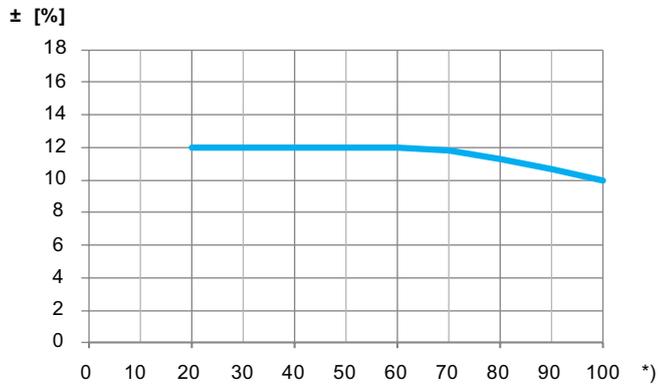
Nominal valve characteristic for all recommended settings.



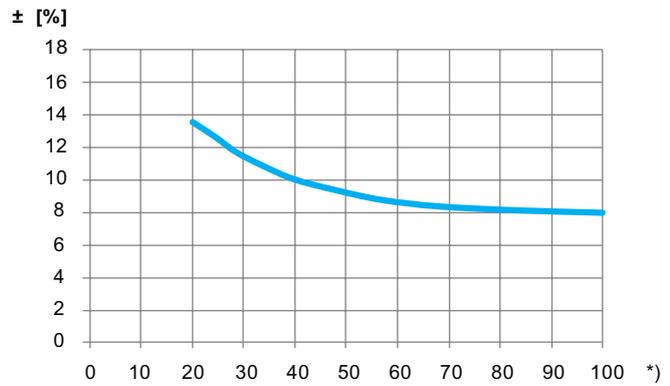
Measuring accuracy

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 = $3^\circ E=100S.U.$), 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 valve must be correctly installed and the water de-aerated.

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.

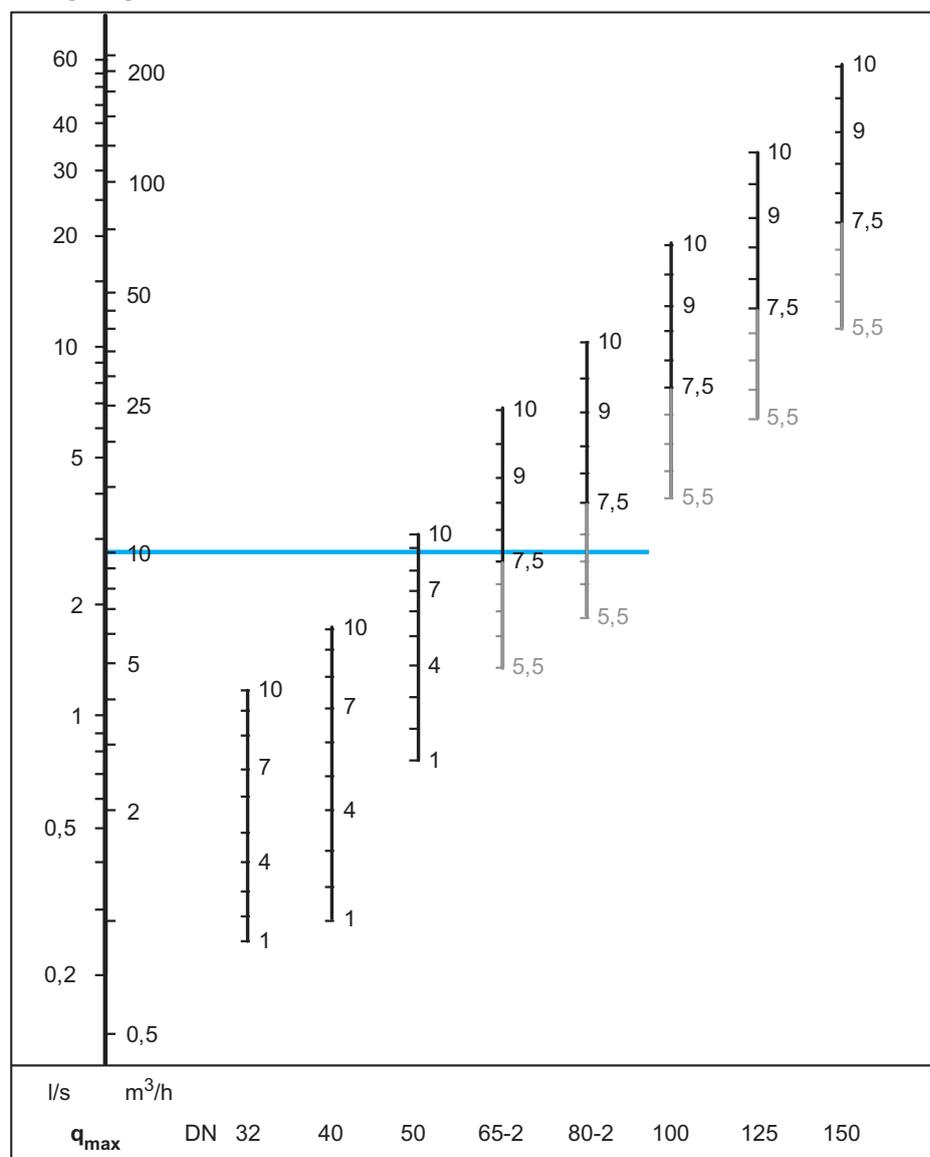
Sizing

Example

Flow is 10 m³/h, available ΔpV is 20 kPa and control signal (input signal) is 0-10 VDC.

1. Go to sizing diagram.
2. Draw a straight horizontal line from 10 m³/h, which will cross the setting bars for all valves which fit the application. In this case DN 50 setting 8,8, DN 65-2 setting 7,7.
3. Check that the available ΔpV is within the working range (between min. and max. allowed ΔpV). In this case, the ΔpV is 20 kPa which is out of range for DN 65 (min. $\Delta pV=25$ kPa valid for setting 10, other settings will require slightly lower ΔpV , this can be checked with the software HySelect).
4. Choose the smallest option (with some safety margin). In this case DN 50 is preferable.
5. Go to the selection tables to select the correct valve and actuator combination. In this case article number 322202-50911 (24 V).

Sizing diagram



DN	Differential pressure ΔpV [kPa]	
	Min.	Max.
32-50	15	800
65-80	25	800
100-125	30	800
150	40	800

DN 65-150: Recommended setting range 7.5–10.

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}).

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 TA-MC100FSE/FSR [kPa]
32	800
40	800
50	800
65	800
80	800
100	800
125	800
150	800

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: 322202-xxxxx / 22202-xxxxxx

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

Example: 322202-50711

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

With standard actuators

		TA-Slider 750	
		0(2)-10 VDC, 0(4)-20 mA, 3-point, on-off	
		0(2)-10 VDC	
		24 VAC	100-240 VAC
		No	
DN	PN	Flow range [m ³ /h]	322202-
32	16	0,88 - 4,21	50711
40	16	1,01 - 6,19	50811
50	16	2,71 - 11,1	50911
65-2	16	9,40 - 24,2	51011
65-2	25	9,40 - 24,2	61011
80-2	16	13,6 - 36,8	51111
80-2	25	13,6 - 36,8	61111
100	16	27,8 - 68,0	51211
100	25	27,8 - 68,0	61211
125	16	45,6 - 120	51311
125	25	45,6 - 120	61311
150	16	78,1 - 207	51411
150	25	78,1 - 207	61411

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	Flow range [m ³ /h]	22202-			
32	16	0,88 - 4,21	081032	101032	091032	111032
40	16	1,01 - 6,19	081040	101040	091040	111040
50	16	2,71 - 11,1	081050	101050	091050	111050
65-2	16	9,40 - 24,2	082065	102065	092065	112065
65-2	25	9,40 - 24,2	083065	103065	093065	113065
80-2	16	13,6 - 36,8	082080	102080	092080	112080
80-2	25	13,6 - 36,8	083080	103080	093080	113080
100	16	27,8 - 68,0	082100	102100	092100	112100
100	25	27,8 - 68,0	083100	103100	093100	113100
125	16	45,6 - 120	082125	102125	092125	112125
125	25	45,6 - 120	083125	103125	093125	113125
150	16	78,1 - 207	082150	102150	092150	112150
150	25	78,1 - 207	083150	103150	093150	113150

DN 32-50: Female threaded

DN 65-150: Flanged

q_{max} values

	Position									
	1	2	3	4	5	6	7	8	9	10
DN 32	880	1 030	1 210	1 440	1 730	2 180	2 590	3 170	3 730	4 210
DN 40	1 010	1 240	1 560	1 990	2 460	3 040	3 790	4 610	5 410	6 190
DN 50	2 710	3 320	4 050	4 900	5 890	6 910	7 850	8 910	10 200	11 100

	Position									
	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
DN 65-2	4 850	5 880	6 900	8 190	9 400	11 400	13 600	15 900	19 500	24 200
DN 80-2	6 650	8 150	9 400	11 100	13 600	16 200	19 400	23 800	29 500	36 800
DN 100	14 000	16 600	19 700	23 400	27 800	32 900	39 500	46 000	56 500	68 000
DN 125	23 000	27 600	33 000	39 300	45 600	55 100	66 600	80 600	98 500	120 000
DN 150	40 200	47 500	56 200	66 200	78 100	93 800	113 000	137 000	170 000	207 000

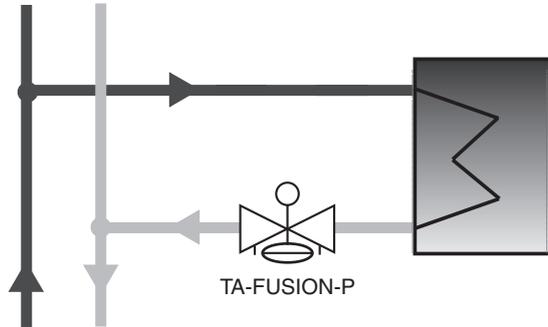
 $q_{max} = l/h$ at each setting and fully open valve plug.

DN 65-150: Recommended setting range 7.5–10.

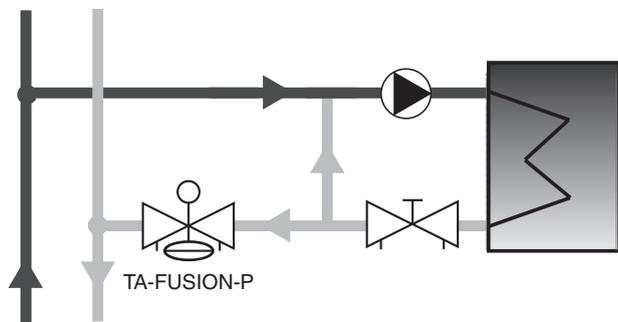
Installation

Application examples

2-way direct circuit



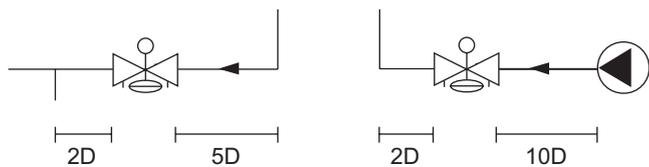
Injection circuit



Normal pipe fittings

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

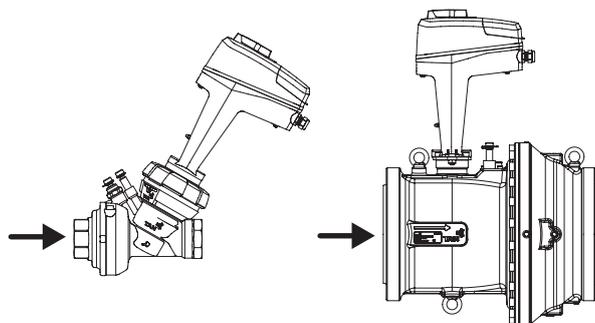
Installation recommendation for accurate measurement due to distortion of fully developed turbulent flow profile.



Flow direction

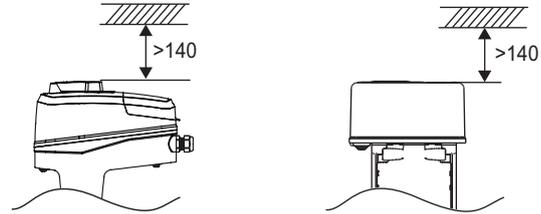
DN 32-50

DN 65-150



Installation of actuator

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



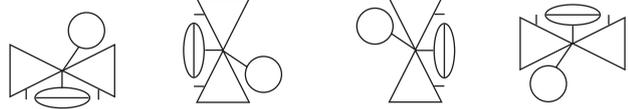
Ingress protection

IP54

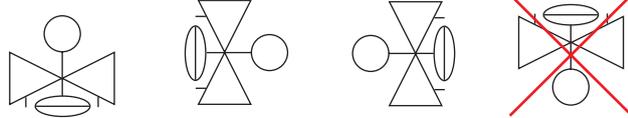
Note: Read carefully the installation instruction of the actuator.

TA-Slider 750

DN 32-50

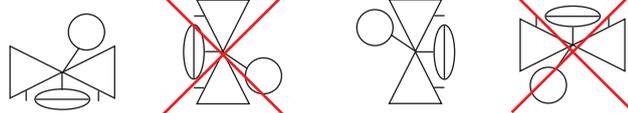


DN 65-150

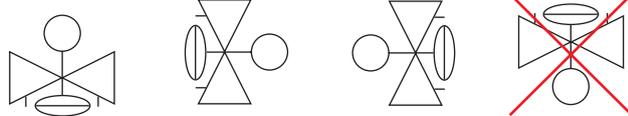


TA-MC100 FSE/FSR

DN 32-50

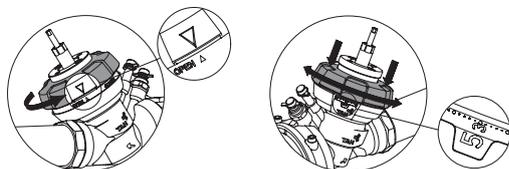


DN 65-150



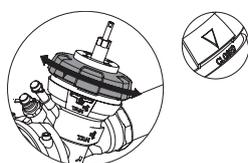
Operating function DN 32-50

Setting



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

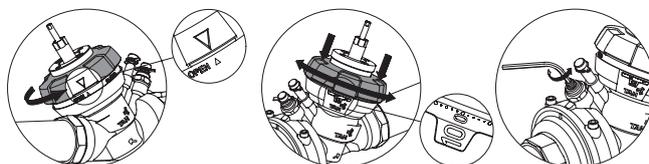
Shut-off



1. Turn the handwheel to "Closed".

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

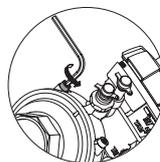
Flushing of the system



1. Open the valve fully with the handwheel.
2. Open the setting fully (position 10).
3. Deactivate the Δp part by opening the flushing spindle fully (anticlockwise).

After flushing, close the flushing spindle and set the valve to previous setting.

Venting



1. To vent the membrane chamber, open the topmost venting screw. **NOTE!** Max. 2 turns opening.

Measuring q

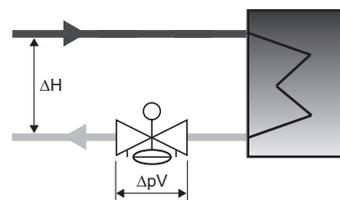
Connect IMI Hydronic Engineering balancing instrument to the measuring points. Input the valve type, size and setting and the actual flow is displayed.

Measuring ΔH

Close the valve according to "Shut-off", deactivate the Δp part according to "Flushing".

Connect IMI Hydronic Engineering balancing instrument to the measuring points and measure.

Important! The valve must be re-opened **fully and the Δp part activated** after the measurement is completed.

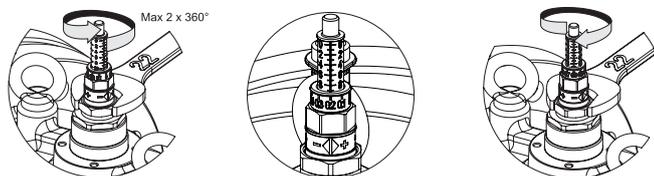


NOTE!

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

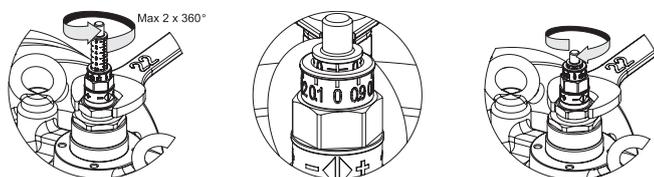
Operating function DN 65-150

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.

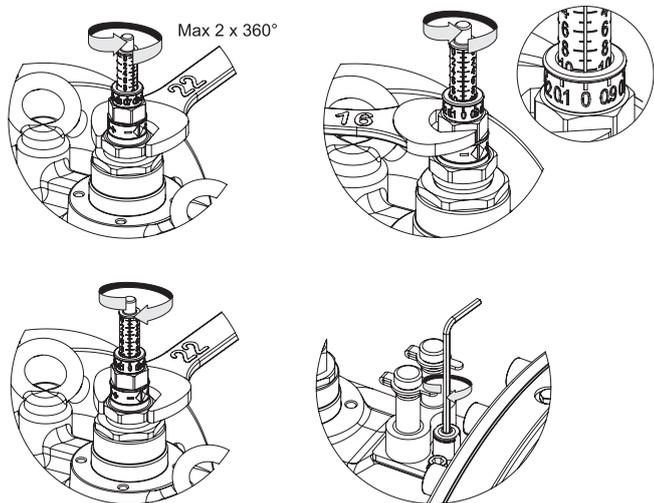
Shut-off



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.

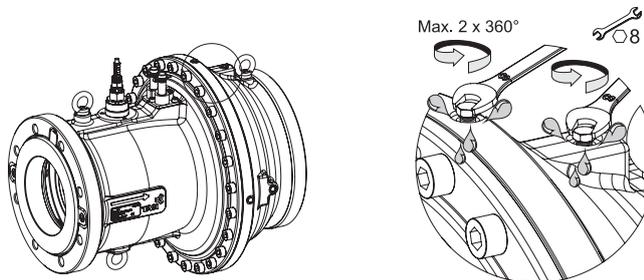
Flushing of the system



1. Release the fixing nut.
2. Turn the setting screw to fully open (position 10).
3. Tighten the fixing nut.
4. Deactivate the Δp part by closing the flushing spindle fully (clockwise).

After flushing, open the flushing spindle and set the valve to previous setting.

Venting



1. To vent the membrane chamber, open the topmost venting screw. **NOTE!** Max. 2 turns opening.

Measuring q

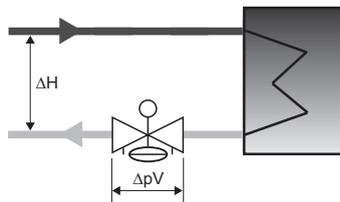
Connect IMI Hydronic Engineering balancing instrument to the measuring points. Input the valve type, size and setting and the actual flow is displayed.

Measuring ΔH

Close the valve according to "Shut-off", deactivate the Δp part according to "Flushing".

Connect IMI Hydronic Engineering balancing instrument to the measuring points and measure.

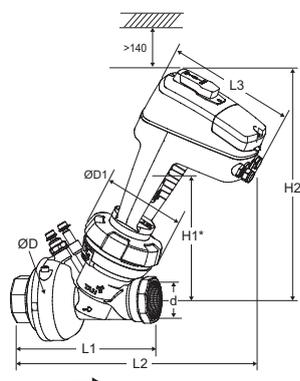
Important! The valve must be re-opened to **previous setting and the Δp part activated** after the measurement is completed.



NOTE!

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

Articles – Sets



DN 32-50 Female threads Threads according to ISO 228

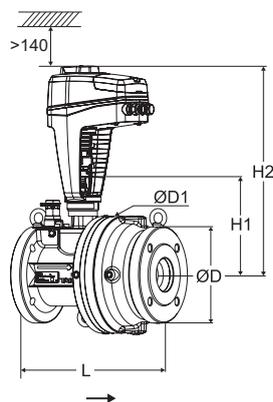
TA-Slider 750 Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point, on-off

24 VAC/VDC

DN	d	D	D1	L1	L2	L3	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16												
32	G1 1/4	130	128	213	410	209	186	361	4,21	8,2	5902276884054	322202-50711
40	G1 1/2	130	128	218	410	209	186	361	6,19	8,2	5902276884115	322202-50811
50	G2	130	128	226	415	209	190	365	11,1	8,7	5902276884177	322202-50911

100-240 VAC

DN	d	D	D1	L1	L2	L3	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16												
32	G1 1/4	130	128	213	410	209	186	361	4,21	8,2	5902276884085	322202-50721
40	G1 1/2	130	128	218	410	209	186	361	6,19	8,2	5902276884146	322202-50821
50	G2	130	128	226	415	209	190	365	11,1	8,7	5902276884207	322202-50921



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	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
65-2	185	286	290	205	401	24,2	47	5902276884238	322202-51011
80-2	200	290	310	205	401	36,8	54	5902276884252	322202-51111
PN 25									
65-2	185	286	290	205	401	24,2	47	5902276884337	322202-61011
80-2	200	290	310	205	401	36,8	54	5902276884351	322202-61111

100-240 VAC

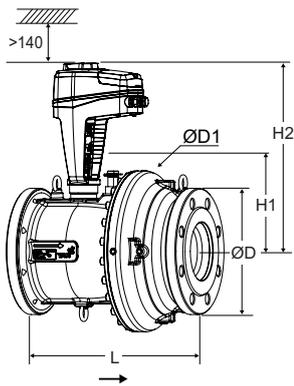
DN	D	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
65-2	185	286	290	205	401	24,2	47	5902276884245	322202-51021
80-2	200	290	310	205	401	36,8	54	5902276884269	322202-51121
PN 25									
65-2	185	286	290	205	401	24,2	47	5902276884344	322202-61021
80-2	200	290	310	205	401	36,8	54	5902276884368	322202-61121

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

24 VAC/VDC

DN	D	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
100	220	310	350	221	403	68,0	61	5902276893292	322202-51211
125	250	344	400	221	403	120	84	5902276893308	322202-51311
150	285	380	480	251	420	207	120	5902276893315	322202-51411
PN 25									
100	235	310	350	221	403	68,0	61	5902276893445	322202-61211
125	270	344	400	221	403	120	84	5902276893322	322202-61311
150	300	380	480	251	420	207	120	5902276893339	322202-61411

100-240 VAC

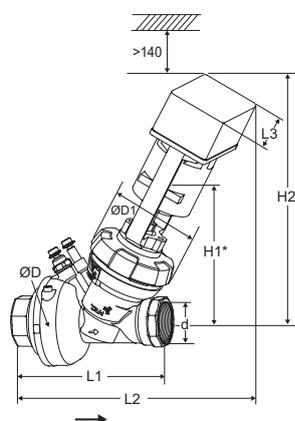
DN	D	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
100	220	310	350	221	403	68,0	61	5902276893346	322202-51221
125	250	344	400	221	403	120	84	5902276893353	322202-51321
150	285	380	480	251	420	207	120	5902276893360	322202-51421
PN 25									
100	235	310	350	221	403	68,0	61	5902276893377	322202-61221
125	270	344	400	221	403	120	84	5902276893384	322202-61321
150	300	380	480	251	420	207	120	5902276893391	322202-61421

*) 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.

Articles – Fail-safe sets, extending (closing)



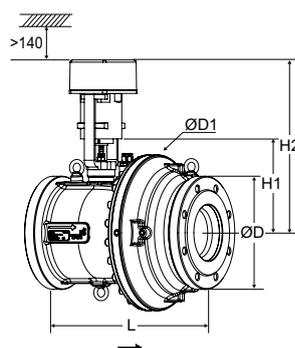
DN 32-50 Female threads Threads according to ISO 228
TA-MC100FSE Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point

24 VAC

DN	d	D	D1	L1	L2	L3	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16												
32	G1 1/4	130	128	213	379	141	186	356	4,21	9,3	5901688821459	22202-081032
40	G1 1/2	130	128	218	379	141	186	356	6,19	9,3	5901688821497	22202-081040
50	G2	130	128	226	383	141	190	360	11,1	9,8	5901688821534	22202-081050

230 VAC

DN	d	D	D1	L1	L2	L3	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16												
32	G1 1/4	130	128	213	379	141	186	356	4,21	9,3	5901688821473	22202-101032
40	G1 1/2	130	128	218	379	141	186	356	6,19	9,3	5901688821510	22202-101040
50	G2	130	128	226	383	141	190	360	11,1	9,8	5901688821558	22202-101050



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	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
65-2	185	286	290	205	382	24,2	48	5901688821916	22202-082065
80-2	200	290	310	205	382	36,8	55	5901688822036	22202-082080
100	220	310	350	221	387	68,0	62	5901688822333	22202-082100
125	250	344	400	221	387	120	85	5901688822456	22202-082125
150	285	380	480	251	404	207	121	5901688823750	22202-082150
PN 25									
65-2	185	286	290	205	382	24,2	48	5901688821954	22202-083065
80-2	200	290	310	205	382	36,8	55	5901688822074	22202-083080
100	235	310	350	221	387	68,0	62	5901688822371	22202-083100
125	270	344	400	221	387	120	85	5901688822494	22202-083125
150	300	380	480	251	404	207	121	5901688823767	22202-083150

230 VAC

DN	D	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
65-2	185	286	290	205	382	24,2	48	5901688821930	22202-102065
80-2	200	290	310	205	382	36,8	55	5901688822050	22202-102080
100	220	310	350	221	387	68,0	62	5901688822357	22202-102100
125	250	344	400	221	387	120	85	5901688822470	22202-102125
150	285	380	480	251	404	207	121	5901688823798	22202-102150
PN 25									
65-2	185	286	290	205	382	24,2	48	5901688821978	22202-103065
80-2	200	290	310	205	382	36,8	55	5901688822098	22202-103080
100	235	310	350	221	387	68,0	62	5901688822395	22202-103100
125	270	344	400	221	387	120	85	5901688822517	22202-103125
150	300	380	480	251	404	207	121	5901688823804	22202-103150

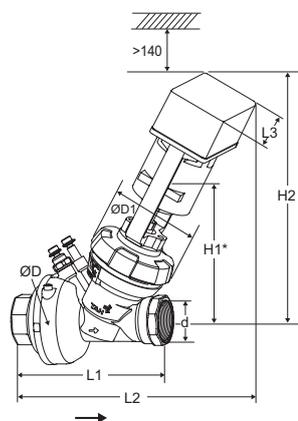
*) Height to the spindle top.

→ = Flow direction

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

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

Articles – Fail-safe sets, retracting (opening)



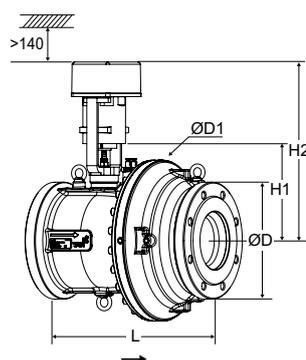
DN 32-50 Female threads Threads according to ISO 228
TA-MC100FSR Input signal: 0(2)-10 VDC, 0(4)-20 mA, 3-point

24 VAC

DN	d	D	D1	L1	L2	L3	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16												
32	G1 1/4	130	128	213	379	141	186	356	4,21	9,3	5901688821466	22202-091032
40	G1 1/2	130	128	218	379	141	186	356	6,19	9,3	5901688821503	22202-091040
50	G2	130	128	226	383	141	190	360	11,1	9,8	5901688821541	22202-091050

230 VAC

DN	d	D	D1	L1	L2	L3	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16												
32	G1 1/4	130	128	213	379	141	186	356	4,21	9,3	5901688821480	22202-111032
40	G1 1/2	130	128	218	379	141	186	356	6,19	9,3	5901688821527	22202-111040
50	G2	130	128	226	383	141	190	360	11,1	9,8	5901688821565	22202-111050



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	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
65-2	185	286	290	205	382	24,2	48	5901688821923	22202-092065
80-2	200	290	310	205	382	36,8	55	5901688822043	22202-092080
100	220	310	350	221	387	68,0	62	5901688822340	22202-092100
125	250	344	400	221	387	120	85	5901688822463	22202-092125
150	285	380	480	251	404	207	121	5901688823774	22202-092150

PN 25

65-2	185	286	290	205	382	24,2	48	5901688821961	22202-093065
80-2	200	290	310	205	382	36,8	55	5901688822081	22202-093080
100	235	310	350	221	387	68,0	62	5901688822388	22202-093100
125	270	344	400	221	387	120	85	5901688822500	22202-093125
150	300	380	480	251	404	207	121	5901688823781	22202-093150

230 VAC

DN	D	D1	L	H1*	H2	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
65-2	185	286	290	205	382	24,2	48	5901688821947	22202-112065
80-2	200	290	310	205	382	36,8	55	5901688822067	22202-112080
100	220	310	350	221	387	68,0	62	5901688822364	22202-112100
125	250	344	400	221	387	120	85	5901688822487	22202-112125
150	285	380	480	251	404	207	121	5901688823811	22202-112150

PN 25

65-2	185	286	290	205	382	24,2	48	5901688821985	22202-113065
80-2	200	290	310	205	382	36,8	55	5901688822104	22202-113080
100	235	310	350	221	387	68,0	62	5901688822401	22202-113100
125	270	344	400	221	387	120	85	5901688822524	22202-113125
150	300	380	480	251	404	207	121	5901688823828	22202-113150

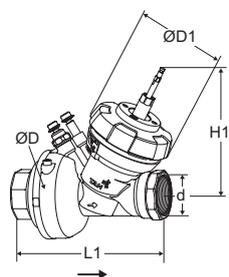
*) Height to the spindle top.

→ = Flow direction

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

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

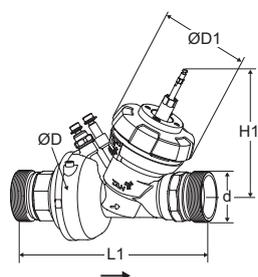
Articles – Valves



Female thread

Threads according to ISO 228

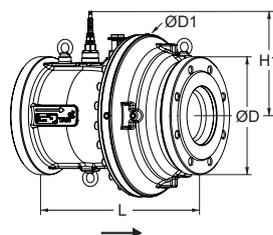
DN	d	D	D1	L1	H1*	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
32	G1 1/4	130	128	213	186	4,21	6,6	7318798638903	22202-001032
40	G1 1/2	130	128	218	186	6,19	6,6	7318798639009	22202-001040
50	G2	130	128	226	190	11,1	7,1	7318798639108	22202-001050



Male thread

Threads according to ISO 228

DN	d	D	D1	L1	H1*	q _{max} [m ³ /h]	Kg	EAN	Article No
PN 16									
32	G1 1/2	130	128	273	186	4,21	7,2	7318794016507	22202-005032
40	G2	130	128	280	186	6,19	7,2	7318794016606	22202-005040
50	G2 1/2	130	128	294	190	11,1	8,1	7318794016705	22202-005050



Flanged

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

DN	D	D1	L	H1*	q _{max} [m ³ /h]	Kg	EAN	Article No	
PN 16									
65-2	185	286	290	205	24,2	45	5901688827581	22202-002065	
80-2	200	290	310	205	36,8	52	5901688827611	22202-002080	
100	220	310	350	221	68,0	59	3831112529427	22202-002100	
125	250	344	400	221	120	82	3831112529441	22202-002125	
150	285	380	480	251	207	118	3831112529489	22202-002150	
PN 25									
65-2	185	286	290	205	24,2	45	5901688827598	22202-003065	
80-2	200	290	310	205	36,8	52	5901688827628	22202-003080	
100	235	310	350	221	68,0	59	3831112529434	22202-003100	
125	270	344	400	221	120	82	3831112529465	22202-003125	
150	300	380	480	251	207	118	3831112529496	22202-003150	

Max. 150°C (double secured measuring points)

DN	D	D1	L	H1*	q _{max} [m ³ /h]	Kg	EAN	Article No	
PN 16									
65-2	185	286	290	205	24,2	45	5902276893407	32202-021007	
80-2	200	290	310	205	36,8	52	5902276893414	32202-021107	
100	220	310	350	221	68,0	59	3831112528116	32202-021207	
125	250	344	400	221	120	82	3831112528147	32202-021307	
150	285	380	480	251	207	118	3831112528178	32202-021400	
PN 25									
65-2	185	286	290	205	24,2	45	5902276893421	32202-021008	
80-2	200	290	310	205	36,8	52	5902276893438	32202-021108	
100	235	310	350	221	68,0	59	3831112528123	32202-021208	
125	270	344	400	221	120	82	3831112528154	32202-021308	
150	300	380	480	251	207	118	3831112528185	32202-021408	

→ = Flow direction

Articles – Actuators

TA-Slider 750, 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-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

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)

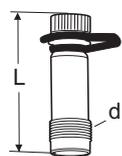
The Plus version of the TA-Slider actuator to be ordered separately. See separate technical leaflet TA-Slider 750.

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.

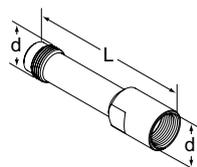
Accessories



Measuring point

For DN 65-150.

d	L	EAN	Article No
M14x1	44	7318792813207	52 179-014
M14x1	103	7318793858108	52 179-015



Extension for measuring point M14x1

Suitable when insulation is used.
For DN 65-150.

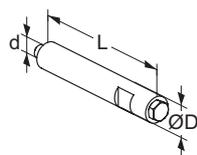
d	L	EAN	Article No
M14x1	71	7318793969507	52 179-016



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



Venting extension

Suitable when insulation is used.

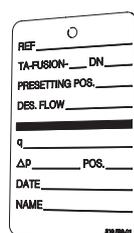
d	D	L	EAN	Article No
M6	12	70	3831112531727	52 759-220



Tamper proof ring

For locking of set Kv_{max} .

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



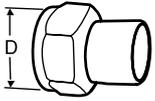
Identification tag

EAN	Article No
7318794001701	22107-000002

Insulation

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

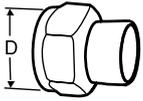
Connections for DN 32-50



Welding connection

Swivelling nut
Max 120°C

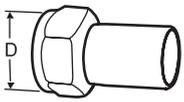
Valve DN	D	Pipe DN	EAN	Article No
32	G1 1/2	32	7318792748806	52 009-032
40	G2	40	7318792748905	52 009-040
50	G2 1/2	50	7318792749001	52 009-050



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

