DR 6/16, DRP 6/16

Butterfly valves

TA

Pressurisation & Water Quality › Balancing & Control › Thermostatic Control

ENGINEERING ADVANTAGE

Suitable as control or shut-off buttery valve in waterborne HVAC systems.

PNEUMATEX › TA › HEIMEIER ›

TA HYDRONICS

Manual adjustment
Manual adjustment and stroke indicator for simple and effective open or close.

Bronze flap
Flap made of bronze for wide medium range.

Technical description

Application:
Hot water, water with antifreeze and anticorrosive compounds (approx. 50%): glycol, glycerine, ethyl alcohol, propylene dichloride alcohol, mono ethyl alcohol, ethyl, methyl alcohol, antidichloride uor methane® N+L.

Function:
Control
Shut-off

Dimensions:
DN 25-200

Pressure class:
PN 6 - PN 16

Temperature:
Max. working temperature: 110°C
Min. working temperature: 0°C
For lower and higher temperatures please contact TA Hydronics.

Material:
DR 6/16:
Body: Cast iron EN-JL 1040
Seat ring: Cast iron EN-JL 1040
Flap: Bronze CC491K
Shaft: CrNi-steel 1.4057
Shaft sealing: O-ring EPDM
DRP 6/16:
Body: Cast iron EN-JL 1040
Seat ring: PTFE
Flap: Bronze CC491K
Shaft: CrNi-steel 1.4057
Shaft sealing: O-ring EPDM

Marking:
DN and PN.

Flow direction:
Optionally from both side.

Connection type:
Wafer type PN 6-16.

Leakage rate:
DR 6/16: ≤ 0.50% of Kvs-value.
DRP 6/16: ≤ 0.05% of Kvs-value.

Valve variant:
- Special varnish, max. 80°C.

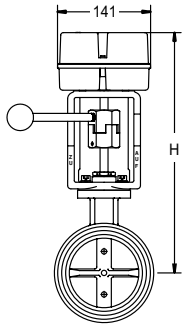
Technical data – Butterfly valve with actuator

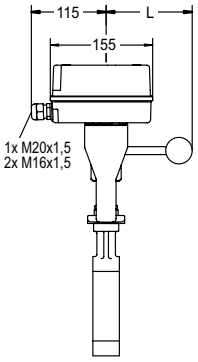
DN				**25**	**32**	**40**	**50**	**65**	**80**	**100**	**125**	**150**	**200**
Kvs-value			m^3/h	12	20	47	85	165	250	435	745	1350	2300
M125	I	Actuating time/90°	s	130									
	Closing pressure		kPa	1600	1600	1600	1200	700	350	200			
M135	I	Actuating time/90°	s	130									
	Closing pressure		kPa	1600	1600	1600	1600	1100	550	300	150	80	30
	II	Actuating time/90°	s	70									
	Closing pressure		kPa	1600	1600	1600	700	350	200	90			
M140	I	Actuating time/90°	s	10									
	Closing pressure		kPa	1600	1600	1600	1600	1600	850	450	230	130	50
M150	I	Actuating time/90°	s					130					
	Closing pressure		kPa					1600	850	450	230	130	50
	II	Actuating time/90°	s					70					
	Closing pressure		kPa					1200	600	350	170	100	40

The closing pressure is limited by the nominal pressure

100 kPa = 1 bar = 10 mWS

M125





DN	H	DR L	DRP L	Kg
25	320	160	170	1,2
32	330	160	170	1,2
40	335	160	170	1,2
50	345	160	170	1,2
65	350	160	170	1,2
80	360	160	170	1,2
100	370	160	170	1,2

Technical description

		M125
Actuating time at 50 Hz/90°	s	130
Nominal torque	Nm	25
Power supply	VAC	230 +6% -10%
Frequency	Hz	50/60 ±5%
Power consumption	VA	6,5
Input signal		3-point
Output signal		-

Enclosure class:
IP 43

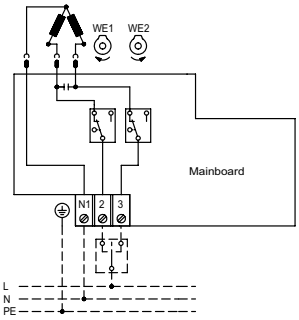
Ambient temperature:
0 - 50°C

Operation mode:
S1-100% ED c/h 1200 EN 60034-1

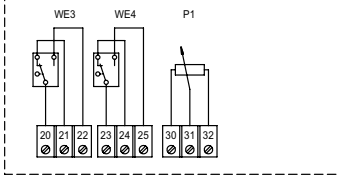
End position switch-off:
Position dependent adjustable

Actuator variants:
- Voltage: 24 VAC
- Position switch unit:
  2 switches (WE3/WE4), potential free, infinitely adjustable.
  Rated load: 10 A / 250 VAC
- Potentiometer with attachment: 0.2 / 1 / 10 kΩ (1.5 VA)

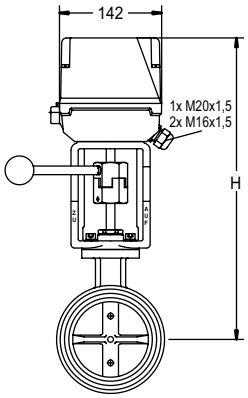
Wiring diagram:
Standard design

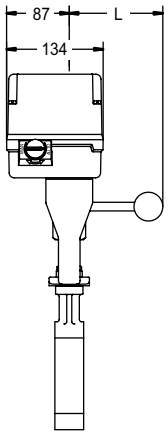


Special accessories



M135





DN	H	DR L	DRP L	Kg
25	385	160	170	2,5
32	395	160	170	2,5
40	400	160	170	2,5
50	410	160	170	2,5
65	415	160	170	2,5
80	425	160	170	2,5
100	435	160	170	2,5
125	450	160	170	2,5
150	470	160	170	2,5
200	545	170	170	2,5

Technical description

		M135	
Actuating time at 50 Hz/90° [1]	s	I = 130	II = 70
Nominal torque	Nm	35	15
Power supply	VAC	230 +6% -10%	
Frequency [1]	Hz	50/60 ±5%	
Power consumption	VA	9	
Input signal		3-point	

1) Please state when ordering

Enclosure class:
IP 54

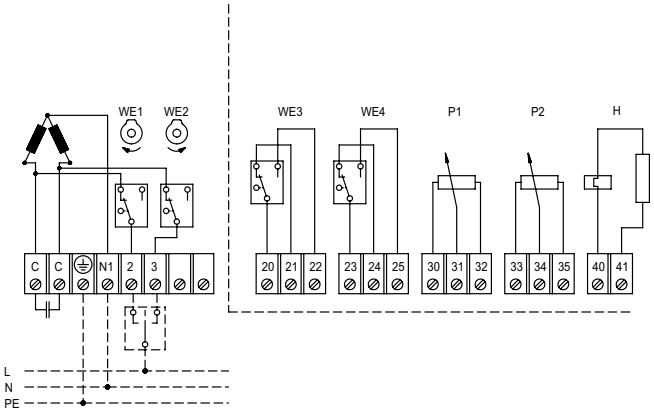
Ambient temperature:
0 - 50°C

Operation mode:
S1-100% ED c/h 1200 EN 60034-1

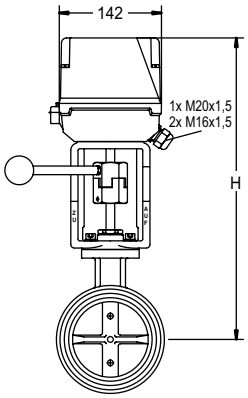
End position switch-off:
Position dependent adjustable

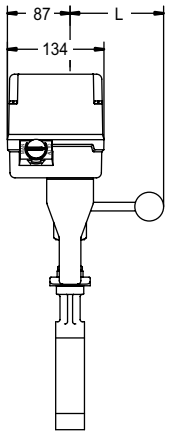
Actuator variants:
- Voltage: 24 VAC
- Position switch unit:
  2 switches (WE3/WE4), potential free, infinitely adjustable.
  Rated load: 10 A / 250 VAC
- Potentiometer with attachment: 0.2 / 1 / 10 kΩ (1.5 VA)
- Enclosure protection: IP 65
- Heater:
  -20 - 50°C: 25 VA
  24, 115, 230 VAC: 50/60 Hz

Wiring diagram:
Standard design **Special accessories**



M140





DN	H	DR L	DRP L	Kg
25	385	160	170	3,0
32	395	160	170	3,0
40	400	160	170	3,0
50	410	160	170	3,0
65	415	160	170	3,0
80	425	160	170	3,0
100	435	160	170	3,0
125	450	160	170	3,0
150	470	160	170	3,0
200	545	170	170	3,0

Technical description

		M140
Actuating time at 50 Hz/90° [1]	s	10
Nominal torque	Nm	50
Power supply	VAC	230 +6% -10%
Frequency [1]	Hz	50/60 ±5%
Power consumption	VA	55
Input signal		3-point

1) Please state when ordering

Enclosure class:
IP 54

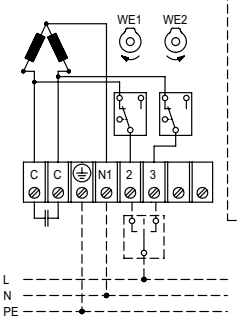
Ambient temperature:
0 - 50°C

Operation mode:
S3-50% ED c/h 1200 EN 60034-1

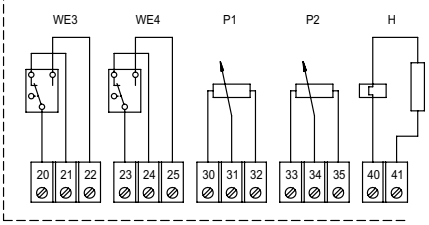
End position switch-off:
Position dependent adjustable

Actuator variants:
- Voltage: 24 VAC
- Position switch unit:
  2 switches (WE3/WE4), potential free, infinitely adjustable.
  Rated load: 10 A / 250 VAC
- Potentiometer with attachment: 0.2 / 1 / 10 kΩ (1.5 VA)
- Enclosure protection: IP 65
- Heater:
  -20 - 50°C: 25 VA
  24, 115, 230 VAC: 50/60 Hz

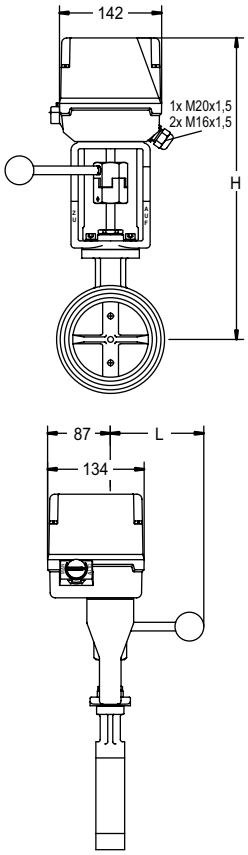
Wiring diagram:
Standard design



Special accessories



M150



DN	H	DR L	DRP L	Kg
65	415	160	170	2,5
80	425	160	170	2,5
100	435	160	170	2,5
125	450	160	170	2,5
150	470	160	170	2,5
200	545	170	170	2,5

Technical description

		M150	
Actuating time at 50 Hz/90° [1]	s	I = 130	II = 70
Nominal torque	Nm	50	40
Power supply	VAC	230 +6% -10%	
Frequency	Hz	50/60 ±5%	
Power consumption	VA	12	
Input signal		3-point	

1) Please state when ordering

Enclosure class:
IP 54

Ambient temperature:
0 - 50°C

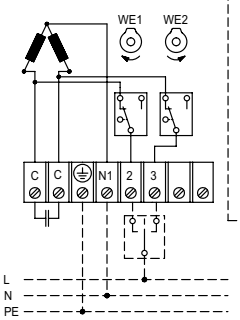
Operation mode:
S1-100% ED c/h 1200 EN 60034-1

End position switch-off:
Position dependent adjustable

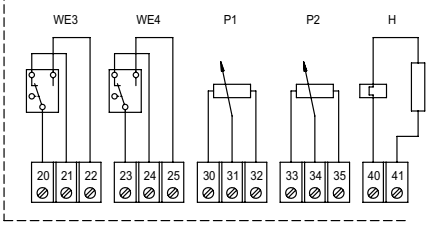
Actuator variants:
- Voltage: 24 VAC
- Position switch unit:
  2 switches (WE3/WE4), potential free, infinitely adjustable.
  Rated load: 10 A / 250 VAC
- Potentiometer with attachment: 0.2 / 1 / 10 kΩ (1.5 VA)
- Enclosure protection: IP 65
- Heater:
  -20 - 50°C: 25 VA
  24, 115, 230 VAC: 50/60 Hz

Wiring diagram:

Standard design

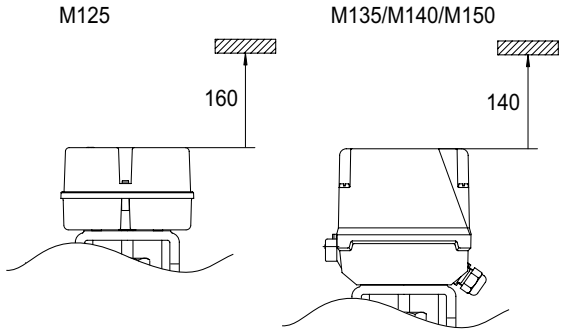


Special accessories

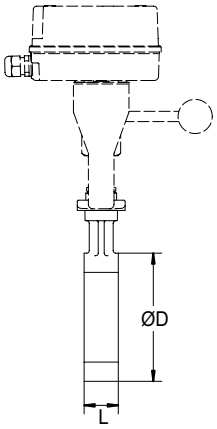


Installation

Note! A free space above the actuators is necessary.

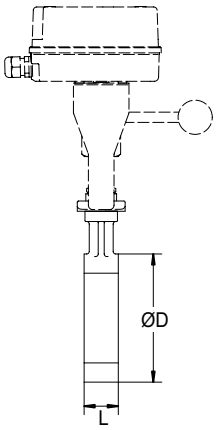


DR 6/16



DN	D	L	Kg	Article No
25	62	30	2,5	60-434-025
32	75	30	2,8	60-434-032
40	85	30	3,0	60-434-040
50	95	35	3,4	60-434-050
65	115	35	4,0	60-434-065
80	130	40	4,7	60-434-080
100	150	40	5,3	60-434-090
125	180	45	7,0	60-434-091
150	205	45	7,9	60-434-092
200	260	50	13	60-434-093

DRP 6/16



DN	D	L	Kg	Article No
25	62	30	2,5	60-435-025
32	75	30	2,8	60-435-032
40	85	30	3,0	60-435-040
50	95	35	3,4	60-435-050
65	115	35	4,0	60-435-065
80	130	40	4,7	60-435-080
100	150	40	5,3	60-435-090
125	180	45	7,0	60-435-091
150	205	45	7,9	60-435-092
200	260	50	13	60-435-093

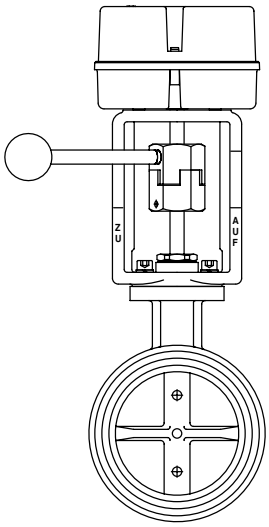
Actuators

Type	Power supply	Nominal torque [Nm]	Input signal	Article No
M125	230 VAC	25	3-point	65-125-001
M135 I	230 VAC	35	3-point	65-135-001
M135 II	230 VAC	15	3-point	65-135-003
M140	230 VAC	50	3-point	65-140-001
M150 I	230 VAC	50	3-point	65-150-001
M150 II	230 VAC	40	3-point	65-150-003

Attachments

Part of attachment	Article No
DN 25-150	
Console	68-490-025
Clutch	68-490-125
Complete attachment	68-490-225
DN 200	
Console	68-490-093
Clutch	68-490-193
Complete attachment	68-490-293

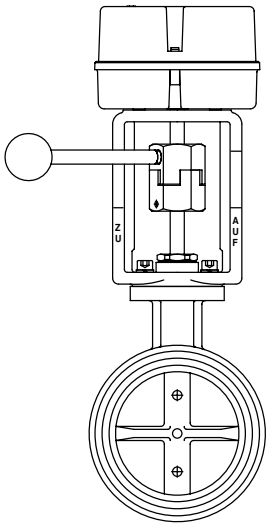
DR 6/16 – Sets with actuator



It is strongly recommended to order sets because of proper actuator's adjustment.

DN	Actuator	Article No
25	M125	69-434-025
25	M135 I	69-434-225
25	M135 II	69-434-325
25	M140	69-434-425
32	M125	69-434-032
32	M135 I	69-434-232
32	M135 II	69-434-332
32	M140	69-434-432
40	M125	69-434-040
40	M135 I	69-434-240
40	M135 II	69-434-340
40	M140	69-434-440
50	M125	69-434-050
50	M135 I	69-434-250
50	M135 II	69-434-350
50	M140	69-434-450
65	M125	69-434-065
65	M135 I	69-434-265
65	M135 II	69-434-365
65	M140	69-434-465
65	M150 I	69-434-665
65	M150 II	69-434-765
80	M125	69-434-080
80	M135 I	69-434-280
80	M135 II	69-434-380
80	M140	69-434-480
80	M150 I	69-434-680
80	M150 II	69-434-780
100	M125	69-434-090
100	M135 I	69-434-290
100	M135 II	69-434-390
100	M140	69-434-490
100	M150 I	69-434-690
100	M150 II	69-434-790
125	M135 I	69-434-291
125	M135 II	69-434-391
125	M140	69-434-491
125	M150 I	69-434-691
125	M150 II	69-434-791
150	M135 I	69-434-292
150	M135 II	69-434-392
150	M140	69-434-492
150	M150 I	69-434-692
150	M150 II	69-434-792
200	M135 I	69-434-293
200	M135 II	69-434-393
200	M140	69-434-493
200	M150 I	69-434-693
200	M150 II	69-434-793

DRP 6/16 – Sets with actuator



It is strongly recommended to order sets because of proper actuator's adjustment.

DN	Actuator	Article No
25	M125	69-435-025
25	M135 I	69-435-225
25	M135 II	69-435-325
25	M140	69-435-425
32	M125	69-435-032
32	M135 I	69-435-232
32	M135 II	69-435-332
32	M140	69-435-432
40	M125	69-435-040
40	M135 I	69-435-240
40	M135 II	69-435-340
40	M140	69-435-440
50	M125	69-435-050
50	M135 I	69-435-250
50	M135 II	69-435-350
50	M140	69-435-450
65	M125	69-435-065
65	M135 I	69-435-265
65	M135 II	69-435-365
65	M140	69-435-465
65	M150 I	69-435-665
65	M150 II	69-435-765
80	M125	69-435-080
80	M135 I	69-435-280
80	M135 II	69-435-380
80	M140	69-435-480
80	M150 I	69-435-680
80	M150 II	69-435-780
100	M125	69-435-090
100	M135 I	69-435-290
100	M135 II	69-435-390
100	M140	69-435-490
100	M150 I	69-435-690
100	M150 II	69-435-790
125	M135 I	69-435-291
125	M135 II	69-435-391
125	M140	69-435-491
125	M150 I	69-435-691
125	M150 II	69-435-791
150	M135 I	69-435-292
150	M135 II	69-435-392
150	M140	69-435-492
150	M150 I	69-435-692
150	M150 II	69-435-792
200	M135 I	69-435-293
200	M135 II	69-435-393
200	M140	69-435-493
200	M150 I	69-435-693
200	M150 II	69-435-793

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