

## ARI change over valve, 3-way form, cast iron or steel, DN 15-250, PN 16/25/40, flanges.



### General

- ARI change over valve for liquids, steam, and gases.
- Face-to-face design FTF series 1 according to DIN EN 558.
- Leakage proof according to EN 12266-1, Rate A.

### Options

- Other materials, for example ductile iron, stainless steel.
- Flanges according to other standards.
- Other pressure ratings.
- With pneumatic actuator or electrical actuator.
- Position indicator.
- TA-Luft Test.

### Materials

	VM 1831	VM 1832	VM 1833
Body	cast iron EN-JL1040	steel EN 1.0619+N	steel EN 1.0619+N
Bonnet DN 15-80	cast iron EN-JL1040	stainless steel EN 1.4021+QT	stainless steel EN 1.4021+QT
Bonnet DN 100-250	cast iron EN-JL1040	steel EN 1.0619+N	steel EN 1.0619+N
Stem	stainless steel EN 1.4021+QT (burnished)	stainless steel EN 1.4021+QT (burnished)	stainless steel EN 1.4021+QT (burnished)
Seat ring DN 15-50	stainless steel EN 1.4021+QT	stainless steel EN 1.4021+QT	stainless steel EN 1.4021
Seat ring DN 65-250	stainless steel EN 1.4021+QT	stainless steel EN 1.4551	stainless steel EN 1.4551
Plug	stainless steel EN 1.4021+QT	stainless steel EN 1.4021+QT	stainless steel EN 1.4021+QT
Packing ring and gasket	pure graphite	pure graphite	pure graphite
Hand wheel, epoxy-coating FE 13	cast iron EN-JL1040	cast iron EN-JL1040	cast iron EN-JL1040

### Technical Data

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
Pressure rating PN 16 (VM 1831)	•	•	•	•	•	•	•	•	•	•	•	•	•
Pressure rating PN 25 (VM 1832)	•	•	•	•	•	•	•	•	•	•	•	•	•
Pressure rating PN 40 (VM 1833)	•	•	•	•	•	•	•	•	•	•	•	•	•
Kvs-value m <sup>3</sup> /h → (straight)	5,9	7,6	9,5	18,8	19,4	37,4	79,5	116	176	256	356	630	1000
Kvs-value m <sup>3</sup> /h ↓ (angel)	9,3	17,9	20,2	29,3	40,1	68,2	107	155	224	395	520	700	1100

(• = standard)

### Max Operating Pressure bar (e) at Different Temperatures

	-60°C - <-10°C <sup>1</sup>	-10°C--120°C	+150°C	+200°C	250°C	300°C	350°C	400°C	450°C
PN 16 (VM 1831)	-	16	14,4	12,8	11,2	9,6	-	-	-
PN 25 (VM 1832)	18,7	25	23,9	22	20	17,2	16	14,8	13,9
PN 40 (VM 1833)	30	40	38,1	35	32	28	25,7	23,8	22,2

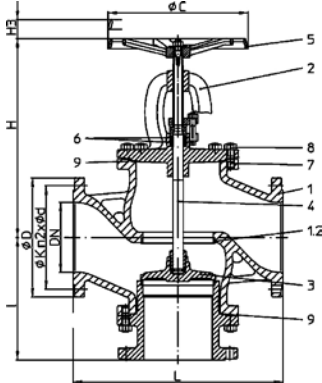
1. Studs and nuts made of A4-70 at temperatures below -10°C.  
 Local conditions must be considered.

### Max Differential Pressure Δp

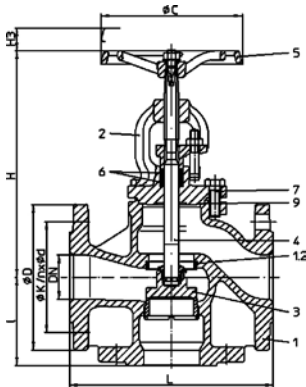
DN	125	150	200	250
(bar)	25	21	14	9

# Change Over Valve

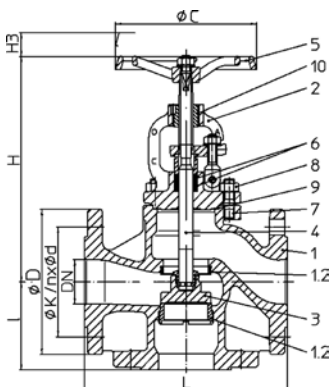
## Dimensional Drawing



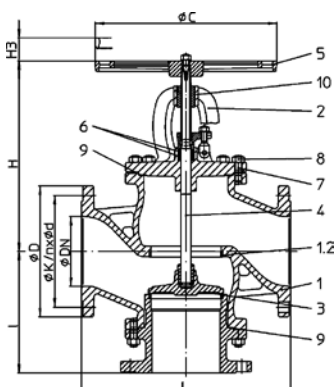
**DN 200-250 VM 1831**



**DN 15-150 VM 1831**



**DN 15-150 VM 1832-1833**



**DN 200-250 VM 1832-1833**

### Dimensions (mm) and Weight VM 1831

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
L	130	150	160	180	200	230	290	310	350	400	480	600	730
l	65	70	75	80	90	100	120	130	150	200	210	350	440
H	209	209	220	242	263	257	320	351	400	458	528	562	665
Ø C	140	140	140	140	160	160	180	200	225	250	400	520	520
H3 (travel)	20	20	20	20	20	20	30	30	30	50	50	90	90
Ø D	95	105	115	140	150	165	185	200	220	250	285	340	405
Ø K	65	75	85	100	110	125	145	160	180	210	240	295	355
n x Ød	4x14	4x14	4x14	4x18	4x18	4x18	4x18	8x18	8x18	8x18	8x22	12x22	12x26
Weight (kg)	5,6	6,8	7,9	10,9	14,6	18	26,2	37	54	84,2	124	155	290

### Dimensions (mm) and Weight VM 1832

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
L	130	150	160	180	200	230	290	310	350	400	480	600	730
l	65	70	75	80	90	100	120	130	150	200	210	350	440
H	209	209	220	242	263	257	320	351	400	458	528	562	665
Ø C	140	140	140	140	160	160	180	200	225	250	400	520	520
H3 (travel)	20	20	20	20	20	20	30	30	30	50	50	90	90
Ø D	95	105	115	140	150	165	185	200	235	270	300	360	425
Ø K	65	75	85	100	110	125	145	160	190	220	250	310	370
n x Ød	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26	12x26	12x30
Weight (kg)	6,1	7,4	8,5	11,8	15,8	19,4	28,2	39,8	58,1	90,6	133,5	167	320

### Dimensions (mm) and Weight VM 1833

DN	15	20	25	32	40	50	65	80	100	125	150	200	250
L	130	150	160	180	200	230	290	310	350	400	480	600	730
l	65	70	75	80	90	100	120	130	150	200	210	350	440
H	209	209	220	242	263	257	320	351	400	458	528	562	665
Ø C	140	140	140	140	160	160	180	200	225	250	400	520	520
H3 (travel)	20	20	20	20	20	20	30	30	30	50	50	90	90
Ø D	95	105	115	140	150	165	185	200	235	270	300	375	450
Ø K	65	75	85	100	110	125	145	160	190	220	250	320	385
n x Ød	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26	12x30	12x33
Weight (kg)	6,1	7,4	8,5	11,8	15,8	19,4	28,2	39,8	58,1	90,6	133,5	177	338

## Markings

The valve is marked with DN, PN, materials, CE (DN 32-500), type no, flow direction arrow and production year.

## Mounting

See separate manual.  
Notice the flow direction arrow.

### Details

- 1 Body
- 1.2 Seat ring
- 2 Bonnet
- 3 Plug
- 4 Stem
- 5 Hand wheel
- 6 Packing ring
- 7 VM 1831 Hexagon screws (DN 15-100)
- 7 VM 1831 Studs (DN 125-250)
- 7 VM 1832-1833 Studs
- 8 Hexagon nut (DN 125-250)
- 9 Gasket
- 10 Insert nuts

## Maintenance

The valve is maintenance free.  
For best function the valve should be exercised regularly.

### Order Number

DN	VM 1831	VM 1832	VM 1833
15	1831015	1832015	1833015
20	1831020	1832020	1833020
25	1831025	1832025	1833025
32	1831032	1832032	1833032
40	1831040	1832040	1833040
50	1831050	1832050	1833050
65	1831065	1832065	1833065
80	1831080	1832080	1833080
100	1831100	1832100	1833100
125	1831125	1832125	1833125
150	1831150	1832150	1833150
200	1831200	1832200	1833200
250	1831250	1832250	1833250