

Modulate Action , Type 431 / 433



## Modulate Action

### Type 431 / 433

Safety valves from the Modulate Action product group feature a standard or proportional opening characteristic. They minimize medium loss when opening and are used for protection from pressure peaks, thermal relief, and liquids.

#### Approvals



#### Industries

- Chemical Industry
- Petrochemical Industry
- Technical Gases
- Pharmaceutical Industry

#### Further Links

 [Modulate Action Catalog \[DE\]](#)

 [Instructions \[DE, EN, FR, IT, SP, RU, CN\]](#)

 [Stückliste Type 431, 433 \[DE\]](#)

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## Datasheet

Product info	Metric unit	US unit
Key feature	Medium capacities with a large proportional opening range	Medium capacities with a large proportional opening range
Nominal diameter inlet	DN 15 - DN 150	1/2" - 6"
Nominal diameter outlet		
Pressure		
Actual orifice diameter d0	12 - 92 mm	0,47 - 3,62 in
Actual orifice area A0	113 - 6.648 mm <sup>2</sup>	0,175 - 10,3 in <sup>2</sup>
Pressure	0,2 - 40 bar	2,9 - 580,15 psig
Flange rating inlet	PN 16 - PN 40	CL150 - CL300
Temperature acc. to DIN EN	-270 to 450 °C	-454 to 842 °F
Temperature acc. to ASME		
Body material	0.6025, 0.7043, 1.0619, 1.4408	Cast iron, Ductile Gr. 60-40-18, SA 216 WCB, SA 351 CF8M
KUB-Materials		
Valve connection	Flange acc. to DIN EN 1092 or ASME B16.5	Flange acc. to DIN EN 1092 or ASME B16.5
Bellows	Stainless steel and elastomer	Stainless steel and elastomer
Type of loading	Spring loaded	Spring loaded
Approvals	PED/ DIN EN ISO 4126-1, PED/ AD 2000-Merkblatt A2, AQSIQ, EAC	PED/ DIN EN ISO 4126-1, PED/ AD 2000-Merkblatt A2, AQSIQ, EAC
Specials	Units converted; No approvals acc. to ASME	Units converted; No approvals acc. to ASME

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## Options

Feature		Option Code
Disc	metal sealing, with detachable lifting aid	J26
	metal sealing, bull-race	J24
	metal sealing, 1.4404	L44
	metal sealing, 1.4404 stellited	J25
	with soft sealing O-ring CR „K”	J21
	with soft sealing O-ring EPDM „D”	J22
	with soft sealing O-ring FKM „L”	J23
	with soft sealing O-ring FFKM „C”	J20
	with soft sealing plate SP „T”	J49
	with soft sealing plate PCTFE „G”	J48
	with soft sealing plate PTFE „A”	J44
	Seat/nozzle	Stellited sealing surface / seat
Bellows	Balanced bellows with closed bonnet	J78
	Balanced bellows with open bonnet	J68
	Balanced bellows for low set pressures with closed bonnet	J78J63
	Balanced bellows for low set pressures with open bonnet	J68J63
	Special materials INCONEL	J78S15 + Werkstoffbez.
	Special materials Hastelloy	
	Elastomer bellows EPDM	J79
Elastomer bellows NBR	J87	
Caps and levers	Screwed cap H2	
	Screwed plain lever H3	
	Screwed packed lever H4	
Spring	heat resistant	X01
	corrosive resistant 1.4310	X04
Test gag	for Cap H2	J70
	for lifting device H4	J69
Bonnet	closed	see Art.No.
	open	see Art.No.
Heating jacket		-
Lift indicator	for lifting device H4	J39J93
Lift stopper	ring	J51
	actuate screw H2	J52
	actuate screw H4	J50
Drain hole	G1/4	J18
	G1/2	J19
O-ring-damper	O-ring damper H2	J65
	O-ring damper H4	J66

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KUB bursting disc

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