

Compact Performance , Type 459 HDD



Compact Performance

Type 459 HDD

The product group Compact Performance includes threaded and flanged safety valves with compact dimensions for economical protection of small and mid-sized capacities. Due to its many orifice diameters, seals, and connections this product group offers a very wide area of application.

Approvals



Industries

- Chemical Industry
- Petrochemical Industry
- Technical Gases
- Oil and Gas Industry
- Power
- Food and Beverage Industry
- Pharmaceutical Industry

Further Links

 [Compact Performance Catalog \[DE\]](#)

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

 [Stückliste Type 459 HDD \[DE\]](#)

Compact Performance , Type 459 HDD

Datasheet

Product info	Metric unit	US unit
Key feature	Metal to metal or sealing plate Massive construction for high pressure	Metal to metal or sealing plate Massive construction for high pressure
Nominal diameter inlet - Thread	1/2" - 1"	1/2" - 1"
Nominal diameter inlet - Flange	DN 15 - DN 25	1/2" - 1"
Nominal diameter outlet		
Pressure		
Actual orifice diameter d0	6 - 9 mm	0,236 - 0.354 in
Actual orifice area A0	28,3 - 63.6 mm ²	0,044 - 0.099 in ²
Pressure	250.01 - 850 bar	3626 - 12328 psig
Flange rating inlet	PN 40 - PN 400	CL150 - CL2500
Temperature acc. to DIN EN	-273 to +400 °C	-459 to +752 °F
Temperature acc. to ASME	-196 to 450 °C	-321 to 82 °F
Body material		
KUB-Materials		
Material outlet body	1.4408	SA 351 CF8M
Material inlet body	1.4404 stellited	SA 479 316L stellited
Valve connection	Thread acc. to DIN ISO 228-1, ISO 7-1 / BS 21 or ASME B1.20.1 Flange acc. to DIN EN 1092-1 or ASME B16.5	Thread acc. to DIN ISO 228-1, ISO 7-1 / BS 21 or ASME B1.20.1 Flange acc. to DIN EN 1092-1 or ASME B16.5
Bellows	Stainless steel (only for d09)	Stainless steel (only for d09)
Type of loading	Spring loaded	Spring loaded
Approvals	PED/ DIN EN ISO 4126-1, AD 2000-Merkblatt A2, ASME Sec. VIII Div. 1, CRN, AQSIQ, EAC	PED/ DIN EN ISO 4126-1, AD 2000-Merkblatt A2, ASME Sec. VIII Div. 1, CRN, AQSIQ, EAC
Specials		

Compact Performance , Type 459 HDD

Options

Feature		Option Code
Disc	metal sealing, 1.4404	Standard
	with soft sealing plate SP „T”	J49
	with soft sealing plate PCTFE „G”	J48
	with soft sealing plate PTFE „A”	J44
Inlet body	Stellited sealing surface/ inlet body	standard
Bellows	Balanced bellows	J78
	Stainless steel bellows for higher set pressure	J55J78
	Bellows Hastelloy	J81
Caps and levers	Screwed cap H2	
	Screwed packed lever H4	
Spring	heat resistant	X01
	corrosive resistant 1.4310	X04
	INCONEL X-750	X08
Test gag	for Cap H2	J70
	for lifting device H4	J69
Heating jacket		H29
Lift indicator	for lifting device H4	J39J93
Lift stopper	ring	J51
	actuate screw H2	J52
	actuate screw H4	J50
O-ring-damper	O-ring damper H2	J65
	O-ring damper H4	J66
Connections	Threaded connection: G, R/BSPT, NPT (combinations on request or in catalog)	diverse
	Flange connection: DIN, ASME (combinations on request or in catalog)	diverse
Free of oil and grease		J85
NACE material test certificate	Sour gas resistance acc. to NACE MR0175; Certificate acc. to DIN EN 10204-3.1	N78
	Sour gas resistance acc. to NACE MR0103; Certificate acc. to DIN EN 10204-3.1	N77
KUB bursting disc		
Special materials	Hastelloy® C4/ 2.4610	
	Monel® 400/ 2.4360	
	Duplex/ 1.4462	