

→ Series 2182

■ SUITABLE FOR

Liquids	neutral and non-neutral	
Air, gases and vapours	neutral and non-neutral	

■ EXAMPLES OF USE

Non-return valve in straight-through form for use on cryogenic tanks, cryogenic containers, transport containers and systems for the production, storage and transport of cryogenic liquefied gases such as LIN, LOX, CO₂, LAr, LNG. Opening pressure approx. 0.1 bar.

- N₂ in pharmaceutical / foodstuffs applications
- O₂ for medical supply equipment
- CO₂ for foodstuffs/ industrial applications
- LAr for welding
- Cooling plants

The fittings are always manufactured free of oil and grease.



■ MATERIAL



■ SPECIFICATION



DN 10 - DN 50



-196°C to +120°C



PN 63

■ APPROVALS

EU type examination

TR ZU 032/2013 - TR ZU 010/2011

Requirements

DGR 2014/68/EU

■ MATERIAL

Component	Material	DIN EN	ASME
Body	Gunmetal	CC499K	CC499K
Valve upper section	Stainless steel	1.4408 / 1.4404	CF8M / 316L
Valve cone	Brass	CW617N	CW617N
Screws	Stainless steel	1.4301	304
Seals	PTFE mod.	PTFE mod.	PTFE mod.
Druckfeder	Stainless steel	1.4310	302
Kegelführung	Stainless steel	1.4404	316L

r	Standard with non-return cone	for neutral and non-neutral media
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■ MEDIUM

GF	gaseous and liquid	Cryogenic liquified gases, vapours and liquids, for gaseous oxygen maximum 40 bar / maximum 60 C
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■ TYPE OF OPERATION

0	without lifting device
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■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter DN		10	15	20	25	32	40	50
Inlet		3/8" (10)	1/2" (15)	3/4" (20)	1" (25)	1 1/4" (32)	1 1/2" (40)	2" (50)
Outlet	3/8" (10)	■						
	1/2" (15)		■					
	3/4" (20)			■				
	1" (25)				■			
	1 1/4" (32)					■		
	1 1/2" (40)						■	
	2" (50)							■

■ TYPE OF CONNECTION INLET / OUTLET

LM1 / LM1	soldering socket LM1 / soldering socket LM1	DIN EN ISO 1127 / DIN EN ISO 1127
LM2 / LM2	soldering socket LM2 / soldering socket LM2	ASTM A312 S10 / ASTM A312 S10
LM3 / LM3	soldering socket LM3 / soldering socket LM3	ASTM A312 S40 / ASTM A312 S40
LM4 / LM4	soldering socket LM4 / soldering socket LM4	DIN EN 12449 / DIN EN 12449
f / f	female thread BSP-P / female thread BSP-P	DIN EN ISO 228-1 / DIN EN ISO 228-1
NPT-f / NPT-f*	female thread NPT / female thread NPT	ANSI B1.20.1 / ANSI B1.20.1

* Threaded connection and other connections on request.

■ DIMENSIONS AND ORDERING CODE FOR PIPE CONNECTIONS

Nominal diameter	DN	10*	15*	20*	25	32*	40	50*
Connection type for pipes according to DIN EN ISO 1127	D	17,2	21,3	26,9	33,7	42,4	48,3	60,3
Dimensions for soldering socket LM1 / soldering socket LM1	e	2,3	2,6	2,9	3,2	3,2	3,6	3,6
Order code XX		CK	CL	CM	BN	CN	CO	CP
Connection type for pipes according to ASTM A312 S10	D	17,15	21,34	26,67	33,40	42,16	48,26	60,33
Dimensions for soldering socket LM2 / soldering socket LM2	e	1,65	2,11	2,11	2,77	2,77	2,77	2,77
Order code XX		AS	AU	AW	AY	BA	BC	BE
Connection type for pipes according to ASTM A312 S40	D	17,15	21,34	26,67	33,40	42,16	48,26	60,33
Dimensions for soldering socket LM3 / soldering socket LM3	e	2,31	2,77	2,87	3,38	3,56	3,68	3,91
Order code XX		AT	AV	AX	AZ	BB	BD	BF
Connection type for pipes according to DIN EN 12449	D	12	15	18	22	28,00	35	42,00
Dimensions for soldering socket LM4 / soldering socket LM4	e	1	1,5	1,5	1,5	1,50	1,50	2
Order code XX		AA	AC	BH	BI	BJ	BK	BL
							BL	BM

* Available from 2023.

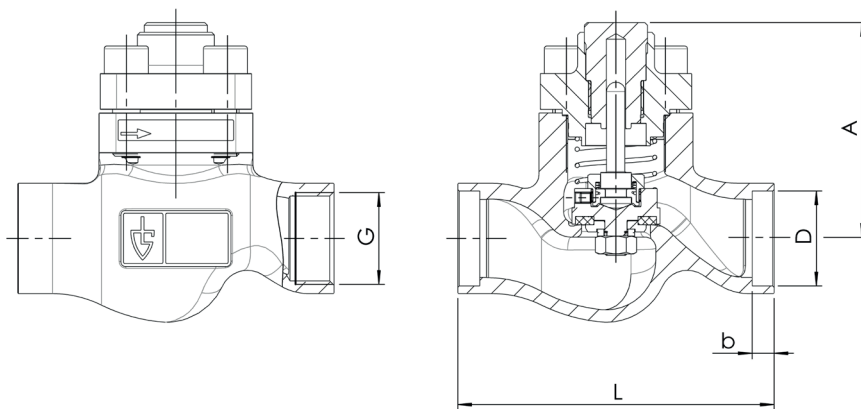
■ SEALS

PTFE	Polytetrafluoroethylene	PTFE mod.	- 196°C to + 120°C
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■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 2182: Connection, installation dimensions									
Nominal diameter	DN	10	15	20	25	32	40	50	
Pressure level	PN	63	63	63	63	63	63	63	63
Operating pressure	bar	63	63	63	63	63	63	63	63
Threaded connection	G	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Installation dimensions in mm	L	60	85	85	115	115	140	160	
	b	6	6	8	8	10	13	20	
	A	75	77	74,5	78,5	106	104	106,5	
Weight	kg	0,7	0,9	1,2	1,4	2,2	3,1	4,7	
Kvs-value	m³/h	1,6	4,4	6,8	11,5	12,2	22,0	40	
Cv-value	gal/min	1,9	5,1	7,9	13,4	14,2	25,9	46,4	

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



Series 2182 ■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Type of operation	Nominal diameter DN	Connection type		Connection size	Seal
					Inlet	Outlet	Inlet/Outlet	
2182	r	GF	0	25	LM4	LM4	BJ / BJ	PTFE
2182	r	GF	0	40	f	f	40 / 40	PTFE
2182								
2182								

■ CERTIFICATES / APPROVALS

C01	Factory certificate acc. DIN EN 10204 2.2 (WKZ 2.2)	☐	C06	ATEX evaluation acc. to 2014/34/EU	☐
C02	Test certificate acc. DIN EN 10204 3.1 (WPZ 3.1)	☐	C11	Certification of the production process especially for gaseous oxygen applications by employment of specific materials	☐
C03	Material test certificate acc. DIN EN 10204 3.1 (MPZ 3.1) (pressure retaining part)	☐			☐

■ ADMISSIONS / ACCREDITATIONS

AA1	EC Type examination acc. to Directive 2014/68/EU	☐		☐
AA4	EAC - certificate/declaration with passport for the valve and laser marking of the valve	☐		☐