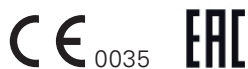


→ Series 2980



■ MATERIAL



■ SPECIFICATION



DN 20



-196°C to +200°C



PN 40

■ SUITABLE FOR

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

■ EXAMPLES OF USE

Pressure regulators for setting and controlling the vessel pressure on tanks for installations used for the storage of cryogenic liquefied gases, such as LIN, LOX, LAr, LNG.

- N₂ for food / pharmaceutical applications
- O₂ for medical supply systems
- LAr for welding
- Refrigeration systems

The pressure regulators are always manufactured free of oil and grease. For applications with oxygen (O₂) applicable up to maximum 40bar and 60°C.

■ APPROVALS

TR ZU 010/2011

Requirements

DGR 2014/68/EU

■ MATERIAL

Component	Material	DIN EN	ASME
Inlet body	Gunmetal	CC499K	CC499K
Outlet body	Gunmetal	CC499K	CC499K
Internal parts	Stainless steel	1.4404	316 L
Bellows	Stainless steel	1.4571	316 Ti
Spring	Stainless steel	1.4310	302
Strainer (250µm)	Stainless steel	1.4301	304

b	with bellows	high-quality stainless steel bellows for pressure build-up and reduction function
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■ MEDIUM

GF	gaseous and liquid	Cryogenic liquified gases, vapours and liquids.
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■ TYPE OF LIFTING MECHANISM

0	without lifting device
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■ OPERATING PRESSURE RANGES

LP	Low-pressure version	2 to 10 bar
SP	Standard version	8 to 24 bar
HP	High-pressure version	22 to 38 bar

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

Nominal diameter DN	20
Inlet	M40x2 (G1 1/4")
Outlet	M40x2 (G1 1/4") ■

■ TYPE OF CONNECTION INLET A / OUTLET B SCREW CONNECTIONS

METm / METm	Standard	Male thread M40x2 / Male thread M40x2	DIN 13-7 / DIN 13-7
m / m		Male thread G1 1/4 / Male thread G1 1/4	DIN EN ISO 228-1 / DIN EN ISO 228-1

■ ACCESSORIES NON-RETURN UNIT (Z1) / CONNECTION G_c

E2980.020.100.XX	Non-return unit made of brass with PTFE ball sealing , male thread connection and cap nut
E2900.020.100.XX	Non-return unit made of stainless steel with PTFE ball sealing , male thread connection and cap nut

XX=10 Male thread M40x2 and cap nut M26x1,5 | XX=20 Male thread G1 1/4 and cap nut G3/4

■ ACCESSORIES SCREW CONNECTION (Z2) / CONNECTION G_A AND G_B

E2980.020.AB.001.XX	Screw connection GAB with solder ball socket	Pipe 28x1,5	DIN EN 12449	CW617N / CW617N
E2980.020.AB.002.XX	Screw connection GAB with welding end	Pipe 26,9x2,0	DIN EN ISO 1127	1.4404 / 316L

XX = 10 cap nut with thread M40x2 | XX = 20 cap nut with thread G1 1/4
Scope of delivery screw connection: 2x cap and 2x pipe sockets

■ ACCESSORIES SCREW CONNECTION (Z3) / CONNECTION G_c

E2980.020.C.001.XX	Screw connection GC with solder ball socket	Pipe 18x1,5	DIN EN 12449	CW617N / CW617N
E2980.020.C.002.XX	Screw connection GC with welding end	Pipe 17,2x2,3	DIN EN ISO 1127	1.4404 / 316L

XX = 10 cap nut with thread M26x1,5 | XX = 20 cap nut with thread G¾
Scope of delivery screw connection: 1x cap and 1x pipe sockets

■ ACCESSORIES SCREW CONNECTION (Z4) / CONNECTION G_R

E2980.020.R.001.XX	Screw connection GR with solder ball socket	Pipe 28x1,5	DIN EN 12449	CW617N / CW617N
E2980.020.R.002.XX	Screw connection GR with solder ball socket	Pipe 18x1,5	DIN EN 12449	CW617N / CW617N
E2980.020.R.003.XX	Screw connection GR with welding end	Pipe 26,9x2,0	DIN EN ISO 1127	1.4404 / 316L
E2980.020.R.004.XX	Screw connection GR with welding end	Pipe 17,2x2,3	DIN EN ISO 1127	1.4404 / 316L

XX = 10 cap nut with thread M40x2 | XX = 20 10 cap nut with thread G1 1/4
Scope of delivery screw connection: 1x cap and 1x pipe sockets

■ SEALS

PTFE	Polytetrafluoroethylene	flat seal	-196°C to +200°C
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■ NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 2980: Connection, installation dimensions			
Version		METm/METm Fine thread according to DIN13-7	m/m Thread according to DIN EN ISO 228-1
Nominal diameter	DN	20	20
Screw connection	G _{A,B,R}	M40x2	G1 1/4"
Screw connection	G _C	M26x1,5	3/4"
Cone connection	W1/W2	37°	60°
Operating pressure range in bar	bar	2 - 10	2 - 10
		8 - 24	8 - 24
		22 - 38	22 - 38
Installation dimensions in mm	H1	139	139
	Hmax	172	172
	H2	63	63
	H3 ¹	156	156
	H4 ²	81	83
	H5 ³	180	182
	D	85	85
	L1	125	125
	L2 ⁴	174	178
	SW1	16	16
	SW2	18	18
	SW3	32	32
Weight	kg	3,4	3,4
Kvs-value	m ³ /h	3,2	3,2

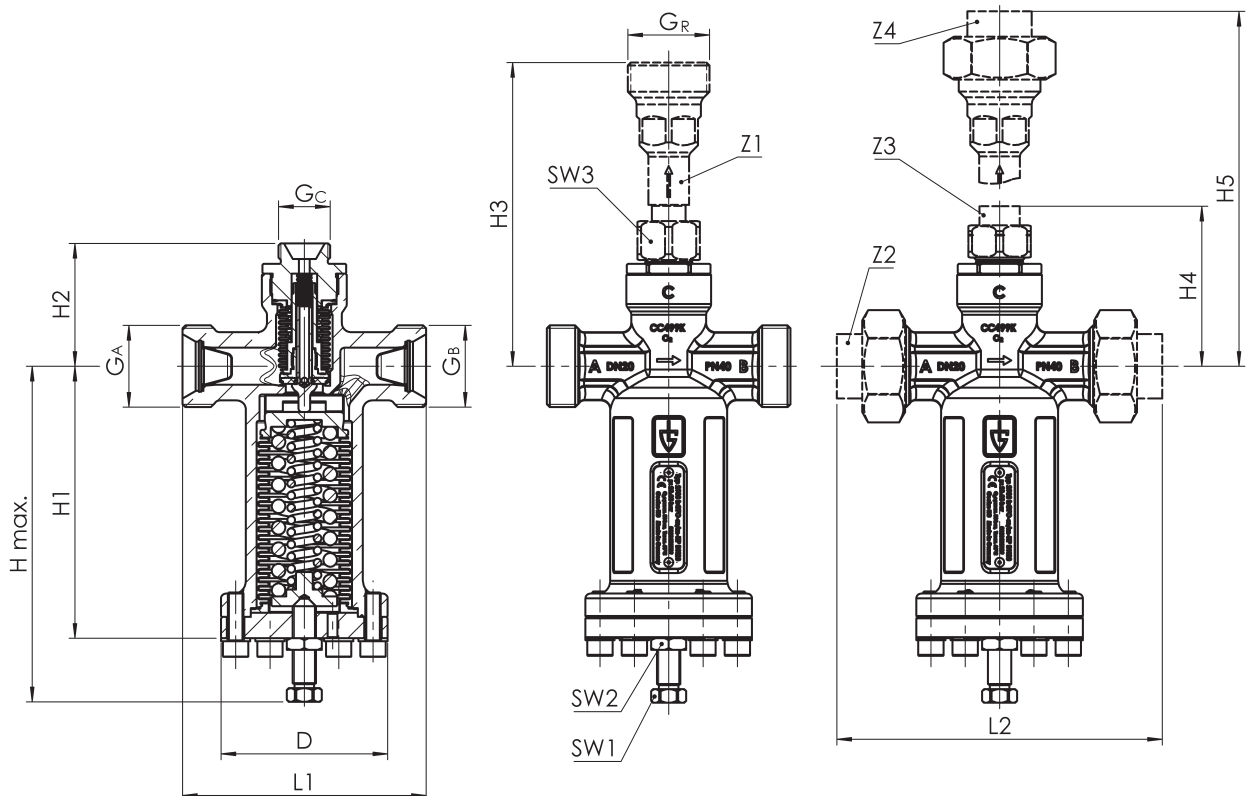
¹H3 corresponds to accessories for the non-return unit (Z1) Items: E2900.020.100.XX.

²H4 corresponds to accessories screw connection (Z3) Items: E2980.020.C.001.XX. Other dimensions on request.

³H5 corresponds to accessories screw connection (Z4) Items: E2980.020.R.001.XX. Other dimensions on request.

⁴L2 corresponds to accessories screw connection (Z2) Items: E2980.020.AB.001.XX. Other dimensions on request.

■ MAIN DIMENSIONS, INSTALLATION DIMENSIONS



Serie 2980 ■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Lifting device	Operating pressure range	Nominal diameter DN	Connection type		Connection size		Seal	Options	Set-pressure
						Inlet	Outlet	Inlet	Outlet			
2980	b	GF	0	SP	20	METm	METm	40x2	40x2	PTFE		15
2980	b	GF	0	HP	20	m	m	G1 1/4	G1 1/4	PTFE		
2980												
2980												

■ CERTIFICATES / APPROVALS

C01	Factory certificate acc. DIN EN 10204 2.2 (WKZ 2.2)	☐	C05	Sealing material Manufacturer certification (FDA, USP 3, 3-A,...), Please indicate description of certificate:	☐
C02	Test certificate acc. DIN EN 10204 3.1 (WPZ 3.1)	☐	C06	ATEX evaluation acc. to 2014/34/EU	☐
C03	Material test certificate acc. DIN EN 10204 3.1 (MPZ 3.1) (pressure retaining part)	☐	C11	Certification of the production process especially for gaseous oxygen applications by employment of specific materials	☐

■ ADMISSIONS / ACCREDITATIONS

AA1	EC Type examination acc. to Directive 2014/68/EU	☐	AL	Individual inspection by notified body inspector – (body to be indicated):	☐
		☐			☐
		☐			☐