

→ Series 2140



■ SUITABLE FOR

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

■ EXAMPLES OF USE

Shut-off valve with position indicator 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. Due to the standard position indicator, the stroke position / position can be immediately recognised via the yellow visual indicator of the manual actuator. The shut-off valve can also be designed with an integrated non-return function.

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

The pressure regulators 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
DIN EN 1626
TPED 2010/35/EU

■ MATERIAL

Component	Material	DIN EN	ASME
Body	Stainless steel	1.4409	CF3M
Valve upper section	Stainless steel	1.4408	CF8M
Extension tube	Stainless steel	1.4404	316L
Threaded bush	Tin bronze	CW459K	C52100
Valve cone	Stainless steel	1.4404	316L
Screws	Stainless steel	1.4301	304
Hand wheel	Stainless steel	1.4408	CF8M
Seals	PTFE mod.	PTFE mod.	PTFE mod.
Position indicator	Plastic	PA glass fibre reinforced	PA glass fibre reinforced
Compression spring*	Stainless steel	1.4310	302
Cone guide*	Stainless steel	1.4404	316L

* only with non-return function

Serie 2140 ■ VALVE VERSION

s	Standard	for neutral and non-neutral media
r	with non-return function	for neutral and non-neutral media

■ 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

R	manual operation with position indicator (available for drive A1 to A3)
S	manual operation without position indicator

■ AVAILABLE NOMINAL DIAMETERS AND CONNECTION SIZES

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

■ INITIATIVE HEIGHT

A0¹	150mm (DN10-DN25)	Upper section without extension
A1¹	190mm (DN10-DN25) / 220mm (DN32-DN50)	Upper section without extension
A2	270 mm	Stainless steel extension tube
A3	370 mm	Stainless steel extension tube

¹Recommended operating temperature: -60°C to +120°C |

NOTE: Dimensions A0 - A3 with valve closed. Please select a initiativ height that does not cause icing on the spindle seal. | Further initiativ heights on request.

■ TYPE OF CONNECTION INLET / OUTLET

SE1 / SE1	butt weld SE1 / butt weld SE1	DIN EN ISO 1127 / DIN EN ISO 1127
SE2 / SE2	butt weld SE2 / butt weld SE2	ASTM A312 S10 / ASTM A312 S10
SE3 / SE3	butt weld SE3 / butt weld SE3	ASTM A312 S40 / ASTM A312 S40
SM1 / SM1	socket weld SM1 / socket weld SM1	DIN EN ISO 1127 / DIN EN ISO 1127
SM2 / SM2	socket weld SM2 / socket weld SM2	ASTM A312 S10 / ASTM A312 S10
SM3 / SM3	socket weld SM3 / socket weld SM3	ASTM A312 S40 / ASTM A312 S40
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	12,0	16,0	17,2	21,3	22,0	26,9	33,7	38,0	42,4	48,3	60,3
Dimensions for butt weld SE1 / socket weld SM1	e	1,0	1,5	1,6	2,0	2,0	2,0	2,0	2,0	2,0	2,0	2,0
Order code XX		AA	AD	AE	AF	AG	AH	AJ	AK	AL	AN	AO
Connection type for pipes according to ASTM A312 S10	D	13,72		17,15	21,34		26,67	33,40		42,16	48,26	60,33
Dimensions for butt weld SE2 / socket weld SM2	e	1,65		1,65	2,11		2,11	2,77		2,77	2,77	2,77
Order code XX		AQ		AS	AU		AW	AY		BA	BC	BE
Connection type for pipes according to ASTM A312 S40	D	13,72		17,15	21,34		26,67	33,40		42,16	48,26	60,33
Dimensions for butt weld SE3 / socket weld SM3	e	2,24		2,31	2,77		2,87	3,38		3,56	3,68	3,91
Order code XX		AR		AT	AV		AX	AZ		BB	BD	BF

* Other connection types on request.

■ SEALS

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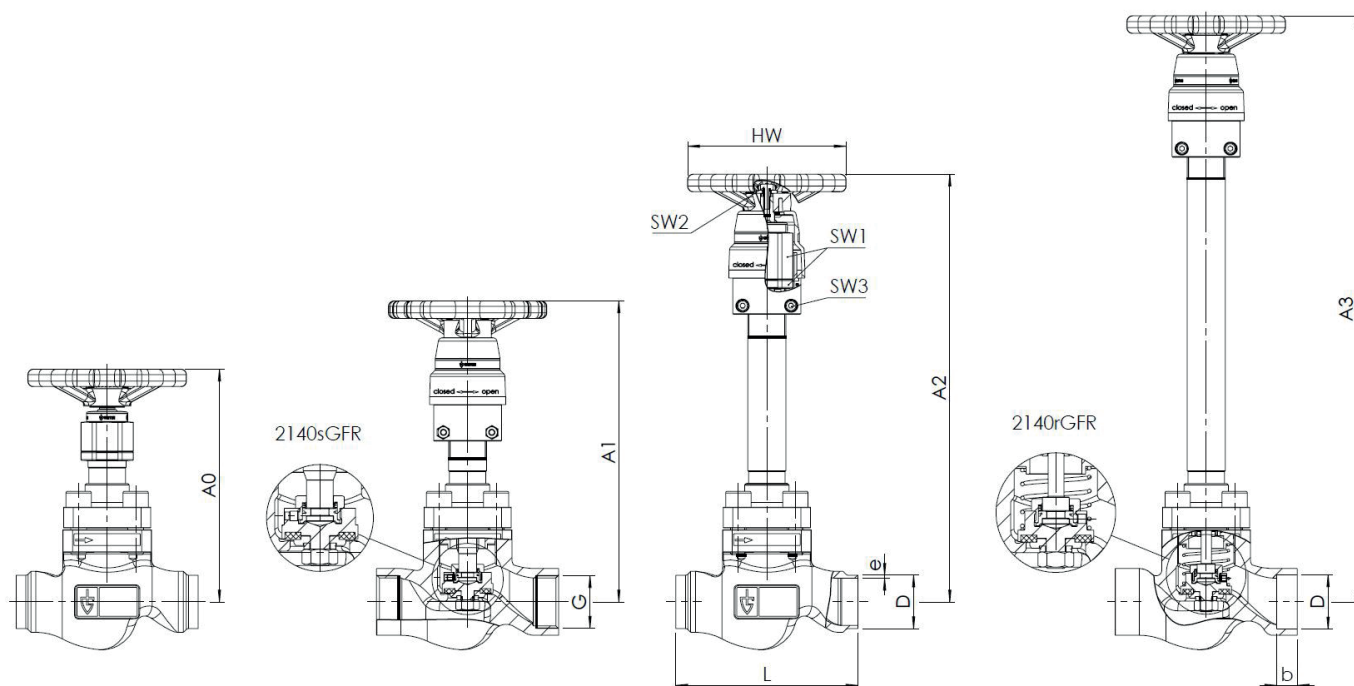
NOMINAL DIAMETERS, CONNECTIONS, INSTALLATION DIMENSIONS

Series 2140: Connection, installation dimensions											
Nominal diameter	DN	10		15	20	25	32	40		50	
Pressure level	PN	63	63	63	63	63	63	63	63	63	
Operating pressure	bar	63	63	63	63	63	63	63	63	50	
Threaded connection	G	1/4	3/8	1/2	3/4	1	1-1/4	1-1/4	1-1/2	2	
Installation dimensions in mm	L	70		85	100	115	115	130		155	
	b	6		10	13	13	13	13		16	
	A0*	154		157	155	160	-	-		-	
	A1*	202		204	205	206	237	241		242	
	A2*	282		284	285	286	287	291		292	
	A3*	382		384	385	386	387	391		392	
	HW	100		100	100	100	125	125		125	
	SW1	30		30	30	30	36	36		36	
	SW2	8		8	8	8	13	13		13	
	Weight (Height A0)	kg**	1,3		1,4	1,9	2,2	-	-		-
	Weight (Height A1)	kg**	1,4		1,5	2,0	2,3	3,5	4,3		6,2
	Weight (Height A2)	kg**	1,6		1,7	2,3	2,5	3,7	4,5		6,4
	Weight (Height A2)	kg**	1,9		2,0	2,5	2,8	4,1	4,9		6,7
Kvs-value	m³/h	1,7	2,3	4,4	7,4	12,0	15,8	21,2	23,8	39,0	
Cv-value	gal/min	2,0	2,7	5,1	8,6	14,0	18,4	24,7	27,7	45,4	

* Dimensions A0 - A3 with valve open. Further initiative heights on request.

** Weights with threaded connection, other connections similar.

MAIN DIMENSIONS, INSTALLATION DIMENSIONS



Series 2140 ■ INDIVIDUAL SELECTION / VALVE CONFIGURATION

Series	Valve version	Medium	Type of operation	Initiative Height	Nominal diameter DN	Connection type		Connection size	Seal
						Inlet	Outlet		
2140	s	GF	R	A1	25	SE1	SE1	AJ / AJ	PTFE
2140	r	GF	S	A2	40	SM3	SM3	BD / BD	PTFE
2140									
2140									

■ 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	☐		☐