

# Valves for Cryogenic Service

## Type 05414 - Check Valve



### Cryogenic-Check Valves, PN50 (DN100=PN40, DN150=PN25)

Stainless steel body and cap  
with spring, opening pressure ca. 0.1 bar  
" cleaned and degreased for oxygen service "

#### Part No. 05414.X.000\*

\*Butt weld connection for stainless steel pipes acc. to DIN EN ISO 1127 or ASTM A312

#### Part No. 05414.X.0004

Socket weld connection for stainless steel pipes acc. to DIN EN ISO 1127 and ASTM A312

#### Available options - on request only:

· Welded stainless steel stubs acc. to DIN EN ISO 1127 or ASTM A312 - length FF + 150mm



#### Applications:

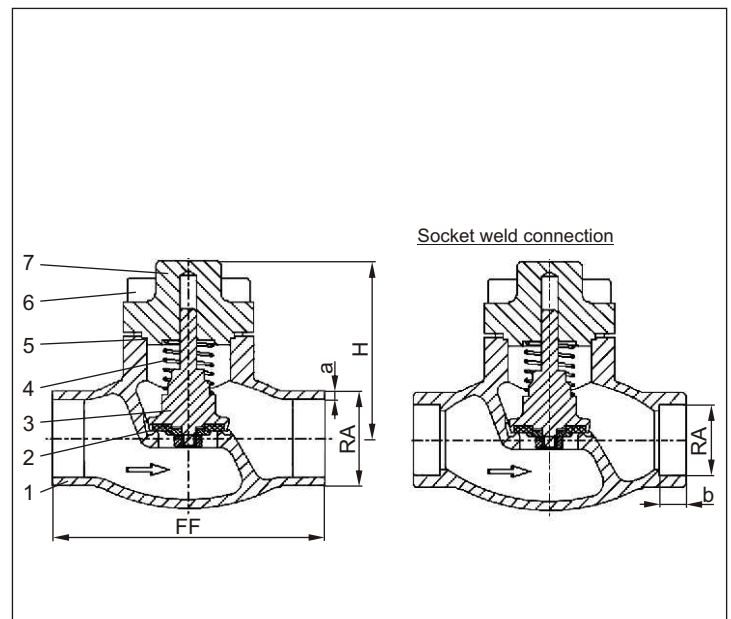
Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.  
Working temperature: -196°C / -321°F (77K) up to +120°C / +248°F (393K)

Materials	DIN EN	ASTM
1 Body	1.4308	A 351 CF8
2 Valve seal up to DN50	PTFE / Carbon filled (25%)	
2a Valve seal from DN65	PTFE	
3 Disc	1.4301	A 276 Grade 304
4 Spring	1.4571	A 276 Grade 316Ti
5 Bonnet gasket	PTFE	
6 Bolts	1.4301/A2	A 194 B8
7 Cap	1.4301	A 276 Grade 304

Standard marking acc. to Pressure Equipment Directive 97/23/EG (PED).



Marking acc. to Directive 99/36/EG (TPED) will only be carried out by written notice on purchase order.



Type 05414 – Standard	Technical data													
	DN	10	15	15	20	25	32	40	40	50	65	80	100	150
Nominal size	.X.	1012	1517	1521	2026	2533	3238	4042	4048	5060	657x	8088	0114	0168
Dimension code	FF	70	85	85	100	115	115	130	130	155	205	245	280	400
Face-to-face dimension	H	71	71	71	72	75	87	95	95	95	125	150	185	215
Height	RA	12.0	17.2	21.3	26.9	33.7	38.0	42.4	48.3	60.3	76.1	88.9	114.3	168.3
Outside pipe-Ø EN ISO 1127	a	1.0	1.6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	3.2	6.0	7.1
Wall thickness pipe EN ISO 1127	RA	13.72	17.15	21.34	26.67	33.40	-	42.16	48.26	60.33	73.03	88.90	114.3	168.3
Outside pipe -Ø ASTM A312	a	S10	S40	S10	S10	S10	-	S10	S10	S10	S40	S10	S40	S40
Wall thickness pipe ASTM A312	b	6	10	10	13	13	-	13	13	16	16	16	20	20
Socket depth	ca. kg	0.7	0.95	1.0	1.3	1.6	2.4	3.9	3.9	5.7	9.6	14.6	20.0	51.0
Weight	m <sup>3</sup> /h	1.6	3.8	4.3	6.7	11.5	14.0	20.6	22.6	37.1	71.1	104.0	170.0	350.0
Kvs – Value	gal /min	1.9	4.4	5.0	7.8	13.4	16.2	23.9	26.3	43.2	82.7	120.9	195.2	401.8
Cv – Value														

Dimensions in mm.