

Selection matrix for cylinder pressure regulators

	CHEMICAL FORMULA	VAPOUR-FILLING PRESSURE MAX. AT 20°C IN BAR	PROPERTIES	SINGLE-STAGE HP-SERIES / TYPE	DUAL-STAGE	WITH PURGE SYSTEM MATERIAL	CYLINDER CONNECTION* DIN 477-1	CYLINDER CONNECTION* DIN 477-5
Acetylene	C2H2	18		f		B	3	
Ammonia	NH3	8.6	f,t,c	HP102		SS	6	
Argon	Ar	200/300	i	HP100	HP101	B	6	54
Arsine	AsH3	14.1	f,t	HP102	0.05	SS	1	
Boron Trichloride	BCL3	0.37	t,c	HP102		X SS	8	
Boron Trifluoride	BF3	68.9	t,c	HP102	1	X SS	8	
Bromotrifluoromethane	CBrF3	14.4	o	HP102		X SS	6	
Calibration gas (non corrosive)		150/200	o	HP100	HP101	B	14	
Calibration gas (corrosive)		150/200	c	HP102	HP103	X SS		
Carbondioxide	CO2	57.3	o	HP100		B	6	
Carbonmonoxide	CO	150/200	f,t	HP100	HP101	SS	5	
Chlorine	CL2 6.8	6.8	t,c	HP102		X SS	8	
Chlorodifluoromethane R22	CHCIF2	31	o	HP100		B	6	
Chloropentafluoroethan R115	C2CIF5	8	o	HP100		B	5	
Compressed air	DL	200/300	o	HP100	HP101	B	13	56
Cyclopropane	C3H6	6.3	f	HP100	0.5	B	1	
Deuterium	D2	100	f	HP100	HP101	b	1	
Diborane (-mixtures)	B2H6	150	f,t	HP102	HP103	X SS	1	
Ethane	C2H6	37.7	f	HP100		B	1	
Ethylene (Ethene)	C2H4	68.6	f	HP100		B	1	
Fluorine	F2	-	t,c				8	
Helium	He	200/300	i	HP100	HP101	B	6	54
Hexafluoro Ethane	C2F6	-	i			B	8	
Hydrogen	H2	200/300	f	HP100	HP101	B	1	57
Hydrogen Bromide	HBR	20	t,c	HP102		X SS	8	
Hydrogen Chlorid	HCL	42.6	t,c	HP102		X SS	8	
Hydrogen Fluoride	HF	1.03	t,c				8	
Hydrogen Sulfide	H2S	18-2	f,t,c				8	
Isobutane	iC4H10	3.02	f	HP100*)		B	1	
Isobutene	C4H8	2.59	f	HP100*)		B	1	
Krypton	Kr	200	i	HP100	HP101	B	6	

Selection matrix for cylinder pressure regulators

	CHEMICAL FORMULA	VAPOUR-FILLING PRESSURE MAX. AT 20°C IN BAR	PROPERTIES	SINGLE-STAGE HP-SERIES / TYPE	DUAL-STAGE	WITH PURGE SYSTEM MATERIAL	CYLINDER CONNECTION* DIN 477-1	CYLINDER CONNECTION* DIN 477-5
Methane	CH4	200	f	HP100	HP101	B	1	
Methylamine	CH5N	3	f,t	HP100**)		B	1	
Methyl Chloride	CH3CL	4.1	f,t	HP100**)		B	1	
Methyl Mercaptan	CH4S	1.7	f,t	HP100**)		B	1	
Neon	Ne	200	i	HP100	HP101	B	6	
Nitrogen	N2	200/300	i	HP100	HP101	B	10	54
Nitrogen Dioxide	NO2	0.962	oxct	HP102		X SS	8	
Nitrogen Monoxide	NO	50	t,c	HP102		X SS	8	
N2O	50.6	ox	HP100	HP101		B	11	
Nitrogen Trifluoride	NF3	100	t	HP102	HP103	X SS	8	
Oxygen	O2	200/300	ox	HP100	HP101	B	9	59
Phosphine	PH3	34.6	f,t	HP102		X SS	1	
Propane	C3H8	8.4	f	HP100		B	1	
Propylene (Propene)	C3H6	10.3	f	HP100		B	1	
Protective gas	H2/N2	200/300	(f)	HP100	HP101	B	1	57
Silane	SiH4	86	f,t	HP102		X SS	1	
Silicon Dichloride	SiH2CL2	0.65	f,t,c			X SS	5	
Sulphur Dioxide	SO2	3.3	t,c	HP102**		X SS	7	
Sulphur Hexafluoride	SF6	22.1	i	HP100		B	6	
Synthetic Air	SL	200/300	ox	HP100	HP101	B	9	59
Tetrafluoro Methane	CF4	bis ca 137	i	HP100	HP101	B	6	
Trifluoro Methane R 23	CHF3	41.8	o	HP100	HP101	B	6	4
Xenon	Xe	bis ca. 33	i	HP100		B	6	

f = flammable

t = toxic

c = corrosive

i = inert

o = others

ox = oxidising

f = brennfördernd

B = brass (nickel and chrome plated) * other common national standards deliverable on request

SS = Stainless steel ** alternative: metering valve „Rossignol“ with cylinder valve connection