



Extinguishing technology Halocarbon agents

Cylinder Halocarbon agents assembled

Extinguishing agent cylinder UL/FM
VSN 200 (drawn) 22 l, 40 l, 80 l, 140 l, 180 l



Approvals



- 1) Part of the system approval VSN 200
- 2) Listed system covered by UL-file EX26532 (VSN 200 and VSN 1230). Extinguishing agent cylinders must only be filled by refilling companies which are listed in UL-file EX26532.
- 3) Valve type B and B25 without UL / ULC approval
- 4) Part of the system approval

SAP designation

e.g. part no. 926210: Extinguishing agent cyl. UL/FM/ 22.0l-A-25bar-VSN 200 EU/UN/EAC

Maintenance

see technical description valve B0481 DN49 / B0482 DN33
 part no. 887866

Pressure at 21 °C (70 °F) bar (psi)	Steel-cylinder ⁷⁾					Nominal volume l (lbs)	Part no. Valve type ⁶⁾		Amount filled ⁵⁾				Empty weight approx. kg (lbs)
	UN	TPED	EAC	TC	DOT		A / A25	B / B25 (not UL / ULC)	min.		max.		
									VdS / CE kg (lbs)	UL / ULC FM / GL kg (lbs)	VdS kg (lbs)	CE / UL / ULC / FM kg (lbs)	
25 (360)	•	•	•			22.0 (55)	926210	926211	8.8 (19.5)	11 (24.3)	22.8 (50.4)	25.0 (55.2)	50 (110)
	•	•	•			40.0 (100)	926212	926213	16 (35.3)	20 (44.1)	41.6 (91.7)	45.6 (100.5)	59 (130)
	•	•	•			80.0 (200) ⁸⁾	926236	926237	32 (70.6)	40 (88.2)	83.2 (183.4)	91.2 (201.0)	104 (229)
	•	•	•	•	•	80.0 (200) ⁹⁾	926234	926235	32 (70.6)	40 (88.2)	83.2 (183.4)	91.2 (201.0)	99 (218)
	•	•	•	•	•	140.0 (350)	926238	926239	56 (123.5)	70 (154.4)	145.6 (320.9)	159.6 (351.8)	131 (289)
	•	•	•	•	•	180.0 (450)	926240	926241	72 (158.8)	90 (198.5)	187.2 (412.7)	205.2 (452.3)	179 (395)
42 (610)	•	•	•			22.0 (55)	926214	926215	8.8 (19.5)	11 (24.3)	22.8 (50.4)	25.0 (55.2)	50 (110)
	•	•	•			40.0 (100)	926216	926217	16 (35.3)	20 (44.1)	41.6 (91.7)	45.6 (100.5)	59 (130)
	•	•	•			80.0 (200) ⁸⁾	926244	926245	32 (70.6)	40 (88.2)	83.2 (183.4)	91.2 (201.0)	104 (229)
	•	•	•	•	•	80.0 (200) ⁹⁾	926242	926243	32 (70.6)	40 (88.2)	83.2 (183.4)	91.2 (201.0)	99 (218)
	•	•	•	•	•	140.0 (350)	926246	926247	56 (123.5)	70 (154.4)	145.6 (320.9)	159.6 (351.8)	131 (289)
	•	•	•	•	•	180.0 (450)	926248	926249	72 (158.8)	90 (198.5)	187.2 (412.7)	205.2 (452.3)	179 (395)
50 (725)	•	•	•			22.0 (55)	926218	926219	8.8 (19.5)	11 (24.3)	18.7 (41.2)	23.1 (50.9)	50 (110)
	•	•	•			40.0 (100)	926220	926221	16 (35.3)	20 (44.1)	34 (74.9)	42 (92.5)	59 (130)
	•	•	•			80.0 (200) ⁸⁾	926250	926251	32 (70.6)	40 (88.2)	68 (149.9)	84 (185.1)	104 (229)
	•	•	•	•	•	80.0 (200) ⁹⁾	926252	926253	32 (70.6)	40 (88.2)	68 (149.9)	84 (185.1)	99 (218)
	•	•	•	•	•	140.0 (350)	926254	926255	56 (123.5)	70 (154.4)	119 (262.3)	147 (324)	131 (289)
	•	•	•	•	•	180.0 (450)	926256	926257	72 (158.8)	90 (198.5)	153 (337.3)	189 (416.6)	179 (395)

5) Order informations

The order has to be specified with the filling quantity.
 The extinguishing agent VSN 200 (HFC-227ea) part no. 889298 must be ordered additionally.

6) Valve type A / A25 (25 bar):

Valve B0482-A DN33 / B0481-A DN49
 Valve B0482-A25 DN33 / B0481-A25 DN49 (for 25 bar)

Valve type B / B25 (25 bar):

(Valves with integrated electrical release)
 Valve B0482-B DN33 / B0481-B DN49
 Valve B0482-B25 DN33 / B0481-B25 DN49 (for 25 bar)

7) Approval with collective certificate by:

- TPED, notified body according to European directive 2010/35/EU
- EAC, notified body according to techn. regulations TR ZU 032/2013
- UN, notified body as UN Pressure Receptacles
- TC (Transport Canada)
- DOT (US Department of Transportation)

⁸⁾ 80.0 l - Exting. agent cylinder with øD = 267 mm (10.51")

⁹⁾ 80.0 l - Exting. agent cylinder with øD = 406 mm (15.98")



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Extinguishing agent cylinder UL/FM VSN 200 (drawn) 22 l, 40 l, 80 l, 140 l, 180 l

Technical data

Extinguishing agentVSN 200 (HFC-227ea)
 Min. fill ratio:
 - VdS / CE0.4 kg/l (25.0 lbs/ft³)
 - UL / ULC / FM0.5 kg/l (31.1 lbs/ft³)
 Max. fill ratio, 25 bar / 42 bar (360 psi / 610 psi):
 - VdS1.04 kg/l (64.9 lbs/ft³)
 - CE / UL / ULC / FM1.14 kg/l (71.1 lbs/ft³)
 Max. fill ratio, 50 bar (725 psi):
 - VdS0.85 kg/l (53.0 lbs/ft³)
 - CE / UL / ULC / FM1.05 kg/l (65.5 lbs/ft³)
 Operating temperature range:
 - VdS / CE-20 °C to +50 °C (-4 °F to 122 °F)
 - UL / ULC / FM-18 °C to +50 °C (0 °F to 122 °F)
 Cylinder filledby a qualified filling centre
 Filling reportwith order no. and cylinder no.
 Transportsee safety data sheet
 Valvessee cylinder valve

Technical data steel cylinder (blank):

Steel cylinder made in Chinaseamless (drawn)
 Working pressuremax. 60 bar / 60 °C (870 psi / 140 °F)
 FinishRAL3000 - flame red
 (Note: colour, colour type are part of the UL / ULC approval)

Marking and stamping according to:

- TPEDacc. to directive 2010/35/EU, ISO 13769
- EAC ...Eurasian Economic Union and regulations TR ZU 032/2013
- UNUN Model Regulations
- TCTC regulations
- DOTDOT regulations

Additional marking:

- Owner marking, **M**inimax **F**euerschutzMF
- Owner no. (acc. to order)xxxxxxx
- Tare weightxxxxxxx

Not included in delivery

Adapter M12x1.5-G1/8 VSN 1230/200 ...887644, see ad-on part cylinder
 Contact pressure gauge VSN 1230/200see monitoring device
 Clamp for extinguishing agent cyl. VSN 1230/200see cylinder rack

Release devices for valve type A / A25 and B / B25:

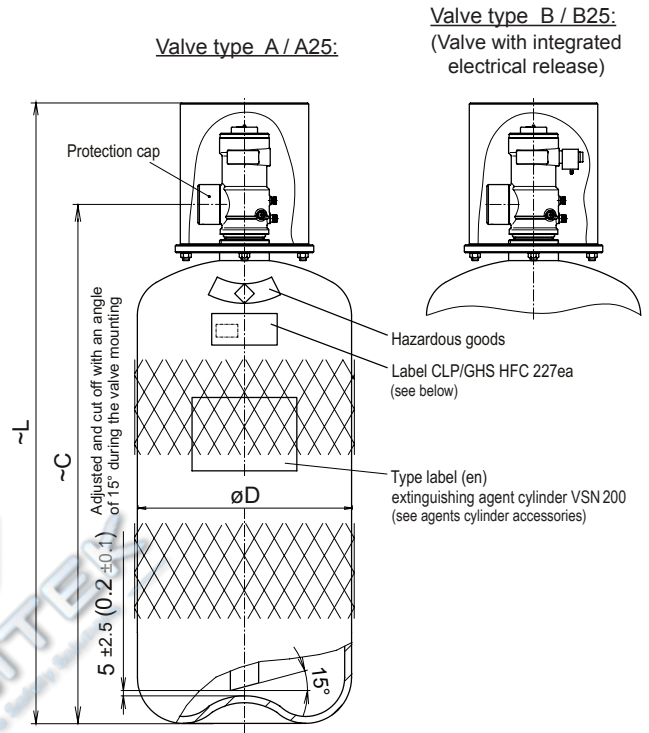
Pneumatic, Pneumatic/Manual, Manual,
 Tackle pneumatic/manual - marinesee ad-on part cylinder

Release devices for valve type A / A25 only:

Electrical and
 Electrical with mech. blocking devicesee ad-on part cylinder

Dimension drawing

Dimensions in mm (inch)



Nominal volume	~L	~C	øD ±3 (±0.12)	Nominal diameter valve
22.0 l (60 lbs)	970 (38.19)	749 (29.49)	229 (9.00)	DN33
40.0 l (100 lbs)	1450 (57.09)	1229 (48.39)	229 (9.00)	
80.0 l (220 lbs)	1960 (77.17)	1757 (69.17)	267 (10.51)	DN49
80.0 l (220 lbs)	1090 (42.91)	887 (34.92)	406 (15.98)	
140.0 l (390 lbs)	1570 (61.81)	1367 (53.82)	406 (15.98)	
180.0 l (500 lbs)	1910 (75.20)	1707 (67.20)	406 (15.98)	

Label CLP/GHS HFC 227ea

HFC 227ea überlagert mit Stickstoff
 HFC 227ea charged with nitrogen

Stoffname / name of substance	Vol. %	EE-Nr. / EG no.
1,1,1,2,3,3,3-Hexafluorpropan /	80-99	207-479-2
Stickstoff / nitrogen	<20	231-783-9

Platz für Adressaufkleber
 space for address label

Achtung
Warning

H280: Enthält Gas unter Druck; kann bei Erwärmung explodieren.
 P410: Vor Sonnenbestrahlung schützen.
 P403: An einem gut belüfteten Ort aufbewahren.
 H280: Contains gas under pressure; may explode if heated.
 P410: Protect from sunlight.
 P403: Store in a well-ventilated place.

Address label of the distributor (system manufacturer) according to order