

# **EX2 Pulse Modulated Electronic Expansion Valve**

**EX2** Series is an electronically controlled expansion device. The capacity is defined through pulse width modulation. The primary application is for display cases and small cold rooms in commercial refrigeration such as supermarkets.

### **Features**

- · Pulse width modulated
- Utilizing standard coils ASC3-24VAC/ 50 Hz or ASC3-230VAC/ 50 Hz (to be ordered separately)
- Shut off function eliminates the necessity of a separate solenoid valve
- Dampened plunger reduces noise an effects of water hammer
- One valve body can be combined with 6 orifices to make 7 capacity ranges, up to 17.2 kW (R 448A)
- · Available with ODF connections
- · Long lifetime, high reliability



**EX2 with ASC3** 

### Selection table

Tyma	Part No.	Description	Capacity Q <sub>n</sub> at 100% Open Valve [kW]*									
Туре	Part No.	Description	R448A	R449A	R450A	R513A	R1234ze					
EX2-M00	801091	Valve less orifice 10 mm x 12 mm	17.2	16.8	44.7	42.0	10.4					
EX2-I00	801090	Valve less orifice 3/8"x / 1/2"	17.2	10.8	11.7	12.0	10.4					
EXO-004	801089	Orifice 4	10.9	10.6	7.4	7.6	6.6					
EXO-003	801088	Orifice 3	7.2	7.0	4.9	5.0	4.4					
EXO-002	801087	Orifice 2	4.3	4.2	2.9	3.0	2.6					
EXO-001	801086	Orifice 1	3.2	3.1	2.2	2.2	1.9					
EXO-000	801085	Orifice 0	1.6	1.6	1.1	1.1	1.0					
EXO-00X	801084	Orifice X	0.9	0.9	0.6	0.6	0.5					
ASC3-24V	801079	Coil ASC3 24 VAC / 50 Hz										
ASC3-230V	801077	Coil ASC3-230VAC / 50 HZ										

Note: \*) Orifice should be selected at maximum 80% of Q<sub>n</sub> to allow covering the load fluctuation.

 $\Delta$  Warning: R1234ze classified as A2L. Use of product only for non-explosive environment, non ATEX zone.

### The nominal capacity (Q<sub>n</sub>) is based on the following conditions:

Refrigerant	Evaporating temperature [°C]	Condensing temperature [°C]	Subcooling
R448A, R449A		+38°C bubble / +43°C dew point	
R450A	+4°C dew point	+38°C bubble / +38.6°C dew point	1K
R513A, R1234ze		+38°C bubble / +38°C dew point	

For selection of other operating condition, please use quick selection tables on the next pages or Controls Navigator selection program.





EX2: Quick selection (included 1.5 bar pressure drop for liquid line components and distributor)

Condensing temperature	R448	NR449	Α		Capacity [kW] Evaporating temperature [°C]							R448A/R449A			
<u>-</u>				1 -							l ==	1		orifice	
[°C]	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	type	
	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.56	0.56	0.56	EXO-00X	
	1.20	1.20	1.20	1.20	1.20	1.20	1.12	1.12	1.12	1.04	1.04	1.04	0.96	EXO-000	
60 bubble/	2.32	2.32	2.40	2.40	2.32	2.32	2.32	2.24	2.24	2.16	2.08	2.00	2.00	EXO-001	
63.4 dew point	3.12	3.20	3.20	3.20	3.12	3.12	3.12	3.04	2.96	2.88	2.80	2.72	2.64	EXO-002	
•	5.28	5.28	5.36	5.28	5.28	5.20	5.12	5.04	4.96	4.88	4.72	4.56	4.48	EXO-003	
	7.92	8.00	8.08	8.08	8.00	7.92	7.84	7.68	7.52	7.36	7.12	6.96	6.72	EXO-004	
	12.56	12.64	12.72	12.72	12.64	12.48	12.32	12.08	11.84	11.60	11.28	10.96	10.64	EX2-M/I	
	0.64	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.64	0.64	0.64	0.64	EXO-00X	
	1.20	1.20	1.20	1.28	1.28	1.28	1.28	1.20	1.20	1.20	1.20	1.12	1.12	EXO-000	
50 bubble/	2.40	2.40	2.48	2.48	2.48	2.48	2.48	2.48	2.40	2.40	2.32	2.32	2.24	EXO-001	
54 dew point	3.20	3.28	3.28	3.36	3.36	3.36	3.36	3.28	3.28	3.20	3.12	3.12	3.04	EXO-002	
	5.36	5.44	5.52	5.60	5.60	5.60	5.60	5.52	5.44	5.36	5.28	5.20	5.04	EXO-003	
	8.08	8.24	8.40	8.48	8.56	8.48	8.48	8.40	8.24	8.16	8.00	7.84	7.60	EXO-004	
	12.72	13.04	13.28	13.36	13.44	13.44	13.36	13.20	13.04	12.80	12.56	12.32	12.00	EX2-M/I	
	0.64	0.64	0.64	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.64	0.64	EXO-00X	
	1.12	1.20	1.20	1.20	1.28	1.28	1.28	1.28	1.28	1.28	1.20	1.20	1.20	EXO-000	
40 bubble/	2.24	2.32	2.40	2.48	2.48	2.56	2.56	2.56	2.48	2.48	2.48	2.40	2.40	EXO-001	
44.5 dew point	2.96	3.12	3.20	3.28	3.36	3.36	3.36	3.36	3.36	3.36	3.28	3.28	3.20	EXO-002	
44.5 dew point	4.96	5.20	5.44	5.52	5.60	5.68	5.68	5.68	5.68	5.60	5.52	5.44	5.36	EXO-003	
	7.52	7.92	8.16	8.40	8.48	8.56	8.64	8.56	8.56	8.48	8.32	8.24	8.08	EXO-004	
	11.92	12.48	12.88	13.20	13.44	13.52	13.60	13.60	13.44	13.36	13.20	12.96	12.72	EX2-M/I	
	0.48	0.56	0.64	0.64	0.64	0.64	0.72	0.72	0.72	0.72	0.72	0.72	0.64	EXO-00X	
	0.96	1.04	1.12	1.12	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	EXO-000	
00 h. h.h.	1.84	2.00	2.16	2.32	2.32	2.40	2.48	2.48	2.48	2.48	2.48	2.40	2.40	EXO-001	
30 bubble/	2.48	2.72	2.96	3.04	3.20	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.20	EXO-002	
34.5 dew point	4.16	4.56	4.88	5.12	5.28	5.44	5.52	5.52	5.52	5.52	5.52	5.44	5.36	EXO-003	
	6.32	6.96	7.44	7.76	8.00	8.24	8.32	8.40	8.40	8.40	8.32	8.24	8.16	EXO-004	
	9.92	10.96	11.68	12.24	12.64	12.96	13.12	13.28	13.28	13.28	13.12	13.04	12.88	EX2-M/I	
		0.40	0.48	0.56	0.56	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	EXO-00X	
		0.72	0.88	0.96	1.04	1.12	1.12	1.12	1.20	1.20	1.20	1.20	1.12	EXO-000	
		1.52	1.76	1.92	2.08	2.16	2.24	2.32	2.32	2.32	2.32	2.32	2.32	EXO-001	
20 bubble/		2.00	2.32	2.56	2.80	2.88	3.04	3.12	3.12	3.12	3.12	3.12	3.12	EXO-002	
25.3 dew point		3.36	3.92	4.32	4.64	4.88	5.04	5.12	5.20	5.28	5.28	5.28	5.20	EXO-003	
		5.12	5.92	6.56	7.04	7.36	7.68	7.84	7.92	8.00	8.00	7.92	7.92	EXO-004	
		8.00	9.44	10.40	11.12	11.68	12.08	12.32	12.48	12.56	12.56	12.56	12.48	EX2-M/I	
				0.40	0.48	0.48	0.56	0.56	0.56	0.56	0.64	0.64	0.64	EXO-00X	
				0.64	0.80	0.88	0.96	1.04	1.04	1.04	1.04	1.04	1.04	EXO-000	
				1.36	1.60	1.76	1.92	2.00	2.08	2.08	2.16	2.16	2.16	EXO-001	
10 bubble/				1.76	2.16	2.40	2.56	2.72	2.80	2.80	2.88	2.88	2.88	EXO-002	
15.5 dew point				3.04	3.60	4.00	4.32	4.48	4.64	4.72	4.80	4.88	4.88	EXO-003	
				4.56	5.44	6.08	6.48	6.80	7.04	7.20	7.28	7.36	7.36	EXO-004	
				7.20	8.56	9.52	10.24	10.72	11.12	11.36	11.52	11.60	11.60	EX2-M/I	
						0.32	0.40	0.40	0.48	0.48	0.48	0.56	0.56	EXO-00X	
						0.56	0.72	0.80	0.88	0.88	0.88	0.96	0.96	EXO-000	
						1.12	1.36	1.52	1.68	1.76	1.84	1.84	1.92	EXO-001	
0 bubble/						1.52	1.84	2.08	2.24	2.40	2.48	2.56	2.56	EXO-002	
5.7 dew point						2.48	3.12	3.52	3.76	4.00	4.16	4.24	4.24	EXO-003	
						3.76	4.72	5.28	5.76	6.00	6.24	6.40	6.48	EXO-003	
						6.00	7.36	8.40	9.04	9.52	9.84	10.08	10.24	EX2-M/I	
						0.00	7.00	0.70	0.04	0.02	0.04	10.00	10.24	L/\Z-IVI/I	





**EX2: Quick selection** (included 1.5 bar pressure drop for liquid line components and distributor)

Condensing	R450	R450A Capacity [kW]								F	R450A	Valve/		
temperature			Evaporating temperature [°C]										orifice	
[°C]	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	type
	0.49	0.49	0.49	0.49	0.48	0.47	0.46	0.45	0.44	0.42	0.41	0.40	0.38	EXO-00X
	0.86	0.87	0.87	0.86	0.85	0.84	0.82	0.80	0.78	0.76	0.73	0.70	0.67	EXO-000
	1.73	1.74	1.74	1.73	1.71	1.68	1.64	1.60	1.56	1.51	1.46	1.41	1.35	EXO-001
60	2.32	2.34	2.34	2.32	2.29	2.26	2.21	2.15	2.09	2.03	1.96	1.89	1.81	EXO-002
	3.89	3.92	3.91	3.89	3.84	3.78	3.70	3.61	3.51	3.40	3.28	3.16	3.04	EXO-003
	5.89	5.93	5.92	5.88	5.81	5.72	5.60	5.46	5.31	5.14	4.97	4.79	4.60	EXO-004
	9.30	9.36	9.35	9.28	9.17	9.02	8.83	8.62	8.38	8.12	7.84	7.55	7.25	EX2-M/I
	0.45	0.47	0.47	0.48	0.48	0.48	0.47	0.46	0.45	0.44	0.43	0.42	0.41	EXO-00X
	0.81	0.83	0.84	0.85	0.85	0.85	0.84	0.82	0.81	0.79	0.77	0.75	0.72	EXO-000
	1.62	1.66	1.69	1.70	1.70	1.69	1.67	1.65	1.62	1.58	1.54	1.49	1.45	EXO-001
50	2.17	2.23	2.27	2.29	2.29	2.27	2.25	2.21	2.17	2.12	2.07	2.01	1.95	EXO-002
	3.64	3.74	3.80	3.83	3.83	3.80	3.76	3.71	3.63	3.55	3.46	3.36	3.26	EXO-003
	5.51	5.66	5.75	5.79	5.79	5.76	5.70	5.61	5.50	5.38	5.24	5.09	4.93	EXO-004
	8.69	8.93	9.08	9.14	9.14	9.09	8.99	8.85	8.68	8.48	8.27	8.03	7.78	EX2-M/I
	0.38	0.41	0.43	0.44	0.45	0.45	0.45	0.45	0.45	0.44	0.43	0.42	0.41	EXO-00X
	0.68	0.73	0.76	0.79	0.80	0.81	0.81	0.80	0.80	0.78	0.77	0.75	0.74	EXO-000
	1.37	1.46	1.53	1.57	1.60	1.61	1.62	1.61	1.59	1.57	1.54	1.51	1.47	EXO-001
40	1.83	1.96	2.05	2.12	2.15	2.17	2.17	2.16	2.14	2.11	2.07	2.02	1.98	EXO-002
	3.07	3.29	3.44	3.54	3.60	3.63	3.63	3.62	3.58	3.53	3.46	3.39	3.31	EXO-003
	4.65	4.98	5.21	5.36	5.45	5.50	5.50	5.47	5.42	5.34	5.24	5.13	5.01	EXO-004
	7.34	7.86	8.22	8.46	8.61	8.68	8.68	8.64	8.55	8.43	8.27	8.10	7.90	EX2-M/I
	0.25	0.31	0.35	0.37	0.39	0.41	0.41	0.42	0.42	0.42	0.41	0.41	0.40	EXO-00X
	0.44	0.55	0.62	0.66	0.70	0.72	0.74	0.74	0.74	0.74	0.73	0.72	0.71	EXO-000
	0.88	1.09	1.23	1.33	1.40	1.44	1.47	1.48	1.49	1.48	1.47	1.45	1.42	EXO-001
30	1.19	1.47	1.65	1.79	1.88	1.94	1.98	1.99	2.00	1.99	1.97	1.94	1.91	EXO-002
	1.98	2.45	2.77	2.99	3.14	3.25	3.31	3.34	3.34	3.33	3.30	3.25	3.20	EXO-003
	3.00	3.72	4.19	4.53	4.76	4.91	5.01	5.05	5.06	5.04	4.99	4.93	4.84	EXO-004
	4.74	5.86	6.62	7.14	7.51	7.75	7.90	7.98	7.99	7.95	7.88	7.77	7.64	EX2-M/I
			0.19	0.25	0.30	0.32	0.34	0.36	0.36	0.37	0.37	0.37	0.37	EXO-00X
			0.33	0.45	0.52	0.58	0.61	0.63	0.65	0.66	0.66	0.66	0.65	EXO-000
			0.66	0.90	1.05	1.15	1.22	1.27	1.30	1.31	1.32	1.31	1.30	EXO-001
20			0.89	1.21	1.41	1.55	1.64	1.70	1.74	1.76	1.77	1.76	1.75	EXO-002
			1.49	2.02	2.36	2.59	2.75	2.85	2.92	2.95	2.96	2.95	2.92	EXO-003
			2.25	3.06	3.57	3.92	4.16	4.32	4.41	4.46	4.48	4.46	4.43	EXO-004
			3.56	4.83	5.64	6.18	6.56	6.81	6.96	7.05	7.07	7.05	6.99	EX2-M/I
					0.07	0.18	0.23	0.26	0.28	0.29	0.30	0.31	0.31	EXO-00X
					0.13	0.31	0.40	0.46	0.50	0.52	0.54	0.55	0.55	EXO-000
					0.25	0.62	0.80	0.92	0.99	1.04	1.07	1.09	1.10	EXO-001
10					0.34	0.84	1.08	1.23	1.33	1.40	1.44	1.47	1.48	EXO-002
					0.57	1.40	1.80	2.06	2.23	2.34	2.41	2.45	2.47	EXO-003
					0.87	2.12	2.73	3.12	3.38	3.55	3.65	3.71	3.74	EXO-004
					1.37	3.35	4.31	4.92	5.33	5.60	5.77	5.86	5.90	EX2-M/I





**EX2: Quick selection** (included 1.5 bar pressure drop for liquid line components and distributor)

Condensing	R513	4				Сар	pacity [	kW]				F	R513A	Valve/
temperature					Eva	orating	g temp	erature	[°C]					orifice
[°C]	15	10	5	0	-5 ·	-10	-15	-20	-25	-30	-35	-40	-45	type
	0.48	0.48	0.48	0.48	0.47	0.46	0.45	0.43	0.42	0.40	0.39	0.37	0.35	EXO-00X
	0.86	0.86	0.86	0.85	0.83	0.81	0.79	0.77	0.74	0.72	0.69	0.66	0.62	EXO-000
	1.71	1.72	1.71	1.69	1.66	1.63	1.59	1.54	1.49	1.43	1.37	1.31	1.25	EXO-001
60	2.30	2.31	2.30	2.27	2.24	2.19	2.13	2.07	2.00	1.92	1.84	1.76	1.68	EXO-002
	3.86	3.87	3.85	3.81	3.75	3.67	3.57	3.46	3.35	3.22	3.09	2.95	2.81	EXO-003
	5.84	5.86	5.83	5.77	5.67	5.55	5.41	5.24	5.06	4.87	4.67	4.46	4.25	EXO-004
	9.21	9.24	9.20	9.10	8.95	8.76	8.53	8.27	7.99	7.69	7.37	7.04	6.70	EX2-M/I
	0.46	0.48	0.48	0.49	0.48	0.48	0.47	0.46	0.45	0.44	0.43	0.41	0.40	EXO-00X
	0.83	0.85	0.86	0.86	0.86	0.85	0.84	0.82	0.81	0.78	0.76	0.73	0.71	EXO-000
	1.65	1.69	1.72	1.73	1.72	1.70	1.68	1.65	1.61	1.57	1.52	1.47	1.42	EXO-001
50	2.22	2.28	2.31	2.32	2.31	2.29	2.26	2.22	2.16	2.11	2.04	1.97	1.90	EXO-002
	3.72	3.81	3.87	3.88	3.87	3.84	3.78	3.71	3.62	3.53	3.42	3.31	3.19	EXO-003
	5.63	5.77	5.85	5.88	5.86	5.81	5.72	5.62	5.49	5.34	5.18	5.01	4.82	EXO-004
	8.88	9.11	9.23	9.27	9.25	9.16	9.03	8.86	8.66	8.42	8.17	7.90	7.61	EX2-M/I
	0.40	0.43	0.45	0.46	0.47	0.47	0.47	0.47	0.46	0.45	0.44	0.43	0.42	EXO-00X
	0.72	0.76	0.80	0.82	0.83	0.84	0.83	0.83	0.82	0.80	0.79	0.77	0.75	EXO-000
	1.43	1.53	1.60	1.64	1.66	1.67	1.67	1.66	1.64	1.61	1.57	1.54	1.49	EXO-001
40	1.92	2.05	2.14	2.20	2.23	2.25	2.24	2.23	2.20	2.16	2.11	2.06	2.01	EXO-002
	3.22	3.44	3.59	3.69	3.74	3.76	3.76	3.73	3.68	3.62	3.54	3.45	3.36	EXO-003
	4.88	5.21	5.43	5.58	5.67	5.70	5.69	5.64	5.57	5.48	5.36	5.23	5.09	EXO-004
	7.70	8.22	8.58	8.81	8.94	8.99	8.98	8.91	8.79	8.64	8.46	8.25	8.03	EX2-M/I
	0.27	0.33	0.37	0.40	0.42	0.43	0.44	0.44	0.44	0.44	0.43	0.43	0.42	EXO-00X
	0.49	0.59	0.66	0.71	0.74	0.77	0.78	0.78	0.78	0.78	0.77	0.76	0.74	EXO-000
	0.97	1.18	1.32	1.42	1.49	1.53	1.56	1.57	1.57	1.56	1.54	1.52	1.49	EXO-001
30	1.31	1.59	1.78	1.91	2.00	2.06	2.09	2.11	2.11	2.09	2.07	2.04	2.00	EXO-002
	2.19	2.66	2.98	3.20	3.35	3.45	3.51	3.53	3.53	3.51	3.46	3.41	3.34	EXO-003
	3.31	4.02	4.51	4.84	5.07	5.22	5.31	5.34	5.34	5.31	5.25	5.16	5.06	EXO-004
	5.22	6.35	7.11	7.64	8.00	8.24	8.37	8.43	8.43	8.37	8.28	8.15	7.99	EX2-M/I
		0.09	0.22	0.29	0.33	0.36	0.38	0.39	0.40	0.40	0.40	0.40	0.39	EXO-00X
		0.16	0.39	0.51	0.58	0.63	0.67	0.69	0.70	0.71	0.71	0.71	0.70	EXO-000
		0.33	0.79	1.02	1.17	1.27	1.34	1.38	1.41	1.42	1.42	1.41	1.40	EXO-001
20		0.44	1.06	1.37	1.57	1.70	1.79	1.86	1.89	1.91	1.91	1.90	1.88	EXO-002
		0.74	1.78	2.29	2.62	2.85	3.00	3.11	3.17	3.20	3.20	3.18	3.15	EXO-003
		1.12	2.69	3.47	3.97	4.32	4.55	4.70	4.79	4.84	4.84	4.82	4.76	EXO-004
		1.77	4.25	5.47	6.27	6.81	7.18	7.42	7.56	7.63	7.64	7.60	7.52	EX2-M/I
					0.14	0.22	0.27	0.30	0.32	0.33	0.34	0.34	0.35	EXO-00X
					0.26	0.40	0.48	0.53	0.57	0.59	0.61	0.61	0.62	EXO-000
					0.51	0.79	0.96	1.06	1.14	1.18	1.21	1.23	1.23	EXO-001
10					0.69	1.07	1.28	1.43	1.53	1.59	1.63	1.65	1.65	EXO-002
					1.15	1.78	2.15	2.39	2.55	2.66	2.73	2.76	2.77	EXO-003
					1.75	2.70	3.26	3.62	3.87	4.03	4.13	4.18	4.19	EXO-004
					2.76	4.26	5.14	5.72	6.10	6.36	6.51	6.59	6.61	EX2-M/I





**EX2: Quick selection** (included 1.5 bar pressure drop for liquid line components and distributor)

Condensing	R1234	4ze				-	acity [	-				R1	234ze	Valve/
temperature					Eva	oorating	g temp	erature	[°C]					orifice
[°C]	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	type
	0.43	0.43	0.43	0.43	0.42	0.41	0.40	0.39	0.38	0.37	0.35	0.34	0.32	EXO-00X
	0.77	0.77	0.77	0.76	0.75	0.74	0.72	0.70	0.68	0.65	0.63	0.60	0.58	EXO-000
	1.53	1.54	1.54	1.52	1.50	1.47	1.44	1.40	1.35	1.31	1.26	1.21	1.15	EXO-001
60	2.06	2.07	2.06	2.05	2.02	1.98	1.93	1.88	1.82	1.76	1.69	1.62	1.55	EXO-002
	3.45	3.47	3.46	3.43	3.38	3.31	3.23	3.15	3.05	2.94	2.83	2.71	2.60	EXO-003
	5.22	5.25	5.23	5.19	5.11	5.01	4.90	4.76	4.61	4.45	4.29	4.11	3.93	EXO-004
	8.24	8.28	8.26	8.18	8.07	7.91	7.73	7.51	7.28	7.03	6.76	6.49	6.20	EX2-M/I
	0.40	0.41	0.42	0.42	0.42	0.41	0.41	0.40	0.39	0.38	0.37	0.36	0.35	EXO-00X
	0.71	0.73	0.74	0.74	0.74	0.74	0.73	0.71	0.70	0.68	0.66	0.64	0.62	EXO-000
	1.41	1.45	1.48	1.49	1.48	1.47	1.45	1.43	1.40	1.36	1.32	1.28	1.24	EXO-001
50	1.90	1.95	1.98	2.00	1.99	1.98	1.95	1.92	1.88	1.83	1.78	1.72	1.66	EXO-002
	3.18	3.27	3.32	3.34	3.34	3.31	3.27	3.21	3.14	3.06	2.98	2.88	2.78	EXO-003
	4.81	4.95	5.03	5.06	5.06	5.02	4.95	4.87	4.76	4.64	4.51	4.36	4.21	EXO-004
	7.60	7.81	7.94	7.99	7.98	7.92	7.82	7.68	7.51	7.32	7.11	6.89	6.65	EX2-M/I
	0.33	0.35	0.37	0.38	0.39	0.39	0.39	0.39	0.38	0.38	0.37	0.36	0.35	EXO-00X
	0.58	0.63	0.66	0.68	0.69	0.70	0.70	0.69	0.68	0.67	0.66	0.64	0.63	EXO-000
	1.16	1.25	1.31	1.36	1.38	1.39	1.39	1.38	1.37	1.34	1.32	1.29	1.25	EXO-001
40	1.56	1.68	1.77	1.82	1.86	1.87	1.87	1.86	1.84	1.81	1.77	1.73	1.68	EXO-002
	2.61	2.82	2.96	3.05	3.11	3.13	3.13	3.11	3.08	3.03	2.96	2.89	2.82	EXO-003
	3.95	4.26	4.48	4.62	4.70	4.74	4.74	4.71	4.66	4.58	4.49	4.38	4.26	EXO-004
	6.23	6.73	7.07	7.29	7.42	7.48	7.48	7.43	7.35	7.23	7.08	6.91	6.73	EX2-M/I
	0.18	0.25	0.29	0.31	0.33	0.34	0.35	0.35	0.35	0.35	0.35	0.34	0.34	EXO-00X
	0.33	0.44	0.51	0.56	0.59	0.61	0.62	0.63	0.63	0.63	0.62	0.61	0.60	EXO-000
	0.65	0.88	1.02	1.11	1.18	1.22	1.25	1.26	1.26	1.26	1.24	1.22	1.20	EXO-001
30	0.88	1.18	1.37	1.49	1.58	1.64	1.68	1.69	1.70	1.69	1.67	1.64	1.61	EXO-002
	1.47	1.97	2.29	2.50	2.65	2.75	2.81	2.83	2.84	2.83	2.80	2.75	2.70	EXO-003
	2.23	2.98	3.46	3.79	4.01	4.16	4.25	4.29	4.30	4.28	4.23	4.17	4.09	EXO-004
	3.51	4.71	5.46	5.98	6.33	6.56	6.70	6.77	6.78	6.75	6.68	6.58	6.45	EX2-M/I
			0.10	0.19	0.23	0.26	0.28	0.29	0.30	0.31	0.31	0.31	0.30	EXO-00X
			0.18	0.33	0.41	0.46	0.50	0.52	0.54	0.54	0.55	0.54	0.54	EXO-000
			0.37	0.66	0.82	0.93	1.00	1.04	1.07	1.09	1.09	1.09	1.08	EXO-001
20			0.50	0.89	1.11	1.25	1.34	1.40	1.44	1.46	1.47	1.46	1.45	EXO-002
			0.83	1.49	1.85	2.09	2.25	2.35	2.41	2.45	2.46	2.45	2.43	EXO-003
			1.26	2.26	2.81	3.16	3.40	3.56	3.66	3.71	3.72	3.71	3.68	EXO-004
			1.98	3.57	4.43	4.99	5.37	5.62	5.77	5.85	5.88	5.86	5.81	EX2-M/I
					0.15	0.20	0.23	0.25	0.26	0.27	0.28	0.28	0.28	EXO-00X
					0.26	0.35	0.41	0.44	0.47	0.48	0.49	0.50	0.50	EXO-000
					0.52	0.70	0.81	0.89	0.94	0.97	0.99	0.99	0.99	EXO-001
1015					0.70	0.94	1.09	1.19	1.26	1.30	1.32	1.33	1.33	EXO-002
					1.17	1.58	1.83	2.00	2.11	2.18	2.22	2.23	2.23	EXO-003
					1.76	2.39	2.77	3.03	3.20	3.30	3.36	3.38	3.38	EXO-004
					2.78	3.77	4.38	4.78	5.04	5.21	5.30	5.34	5.33	EX2-M/I

 $\triangle$  Warning: R1234ze classified as A2L. Use of product only for non-explosive environment, non ATEX zone.



# Technical data

MOPD (maximum operating pressure differential)	30 bar
Medium Temperature	-40+50°C
Maximum Working Pressure PS	40 bar
Test Pressure PT	44 bar

Lifetime with EC2	80 Million cycles
(pulse cycle time 6 sec)	life equivalent to 15 yr.
Seat leakage	< 4cc/min. Nitrogen with
	10 bar differential pressure
Weight	0.25 kg

# Dimensions [mm]



