



SNÍMAČE PRŮTOKU PEM-1000

Série PEM-1000

PEMDN0015PN16.1

Snímač průtoku 4-20mA DN15 PN16 316TI/PTFE

- Indukční princip měření
- Rozsah 0,085 až 28 274 m³/h
- Teplota -25 až 150 °C
- Výstup 4-20 mA, RS232C, RS485
- Tlaková odolnost 40 Bar



POPIS PRODUKTU

Princip měření indukčního průtokoměru je založen na Faradayově zákonu o indukci napětí v pohybujícím se vodiči: pohybuje-li se elektrický vodič v magnetickém poli, pak se na něm indukuje elektrické napětí, jehož velikost je přímo úměrná střední rychlosti pohybu tohoto vodiče. V případě indukčního průtokoměru je vodič vytvářen elektricky vodivou měřenou kapalinou, která se pohybuje v magnetickém poli. Při pohybu kapaliny se na ní indukuje elektrické napětí, které je snímáno dvojicí elektrod. Velikost tohoto napětí je přímo úměrná střední rychlosti proudění měřené kapaliny

Měřicí systém se skládá z převodníku a snímače.

Jsou k dispozici dvě verze:

Kompaktní provedení: převodník a snímač tvoří mechanickou jednotku PEM-1000ALW

Vzdálená verze: Snímač se montuje odděleně od převodníku PEM-1000NW

Vlastnosti:

flexibilní a inteligentní montážní systém

rychlá změna z kompaktního na oddělené provedení

inovační a vysoký výkon průtokoměru pro každé použití

robustní a odolný kryt snímače a převodníku

Aplikace Indukční průtokoměr pro obousměrné měření kapalin s minimální vodivostí ≥ 5 mS/cm: kyseliny, alkálie, barvy, pasty, voda, odpadní vody, atd

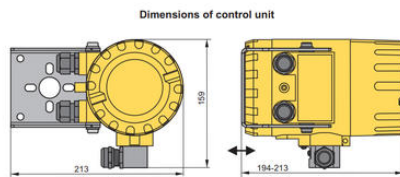
CERTIFIKÁTY

[Certifikáty ke stažení](#)

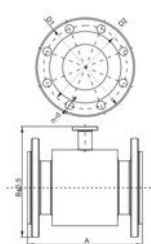
SPECIFIKACE

Hmotnost	3,5 kg
Materiál kontaktní části	PTFE
Napájecí napětí AC max.	260 V AC
Napájecí napětí AC min.	90 V AC
Přesnost klasifikace	$\pm 0,5$ % dle normy EN837-1

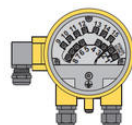
Procesní připojení	DN15 PN16
Teplota média max.	130 °C
Teplota média min.	-25 °C
Teplota okolí do	60 °C
Teplota okolí od	-20 °C
Tlaková odolnost	16 bar
Třída krytí	IP67
Typ signálu	4-20 mA



Dimensions [mm]								Weight
DN	PN	A	B	D1	D2	d	s	
15	15	153	80	80	14	4	2,5	15
15	40	153	80	80	14	4	2,5	15
20	20	160	109	75	14	4	3	20
25	25	160	109	100	14	4	3,5	25
40	40	180	130	110	18	4	4	40
50	50	191	140	125	18	4	4	50
65	65	209	150	145	18	4	4	65
80	80	224	160	160	18	4	4	80
100	100	245	180	180	18	4	4	100
125	125	275	200	200	22	4	5	125
150	150	305	220	220	22	4	5	150
200	200	430	320	320	22	4	5	200
250	250	497	400	413	26	12	8	250
300	300	542	450	475	26	12	8	300
400	400	670	550	575	30	16	10	400
500	500	750	650	675	30	16	10	500
600	600	827	720	743	30	16	10	600
700	700	907	820	843	30	16	10	700
800	800	975	890	915	34	20	12	800
1000	1000	1145	1100	1125	38	24	16	1000
1200	1200	1285	1240	1265	42	28	18	1200



DN 10 - DN 150 A x 5 mm
DN 200 - DN 1000 A x 10 mm



	Terminal	Description
Power supply	1	90...280V AC
	2	15V 10...36V DC (in-mount)
Binary output 1	3	reverse polarity protection, galvanic insulation, passive
Pulse/frequency output	4	reverse polarity protection, galvanic insulation, passive
Current output 4-20 mA	5	active
	6	active
Communication	7	RS 485 A (positive on request)
	8	RS 485 B
	9	RS 485
Binary input (passive)	10	reverse polarity protection, galvanic insulation
Binary output 2	11	reverse polarity protection, galvanic insulation, passive
	12	reverse polarity protection, galvanic insulation, passive

Dimensions [mm]								Weight
DN	PN	A	B	D1	D2	d	s	
15	15	153	80	80	14	4	2,5	15
15	40	153	80	80	14	4	2,5	15
20	20	160	109	75	14	4	3	20
25	25	160	109	100	14	4	3,5	25
40	40	180	130	110	18	4	4	40
50	50	191	140	125	18	4	4	50
65	65	209	150	145	18	4	4	65
80	80	224	160	160	18	4	4	80
100	100	245	180	180	18	4	4	100
125	125	275	200	200	22	4	5	125
150	150	305	220	220	22	4	5	150
200	200	430	320	320	22	4	5	200
250	250	497	400	413	26	12	8	250
300	300	542	450	475	26	12	8	300
400	400	670	550	575	30	16	10	400
500	500	750	650	675	30	16	10	500
600	600	827	720	743	30	16	10	600
700	700	907	820	843	30	16	10	700
800	800	975	890	915	34	20	12	800
1000	1000	1145	1100	1125	38	24	16	1000
1200	1200	1285	1240	1265	42	28	18	1200

Dimensions [mm]								Weight
DN	PN	A	B	D1	D2	d	s	
15	15	153	80	80	14	4	2,5	15
15	40	153	80	80	14	4	2,5	15
20	20	160	109	75	14	4	3	20
25	25	160	109	100	14	4	3,5	25
40	40	180	130	110	18	4	4	40
50	50	191	140	125	18	4	4	50
65	65	209	150	145	18	4	4	65
80	80	224	160	160	18	4	4	80
100	100	245	180	180	18	4	4	100
125	125	275	200	200	22	4	5	125
150	150	305	220	220	22	4	5	150
200	200	430	320	320	22	4	5	200
250	250	497	400	413	26	12	8	250
300	300	542	450	475	26	12	8	300
400	400	670	550	575	30	16	10	400
500	500	750	650	675	30	16	10	500
600	600	827	720	743	30	16	10	600
700	700	907	820	843	30	16	10	700
800	800	975	890	915	34	20	12	800
1000	1000	1145	1100	1125	38	24	16	1000
1200	1200	1285	1240	1265	42	28	18	1200

Flow value table in [m³/h]						
DN	v16 bar	v10 bar	v6 bar	v4 bar	v2 bar	
15	0,088	0,283	0,848	1,414	2,262	2,827
20	0,131	0,386	1,169	1,940	2,911	3,677
25	0,174	0,509	1,554	2,566	3,860	4,839
32	0,220	0,651	2,000	3,280	4,960	6,177
40	0,280	0,826	2,531	4,133	6,137	7,691
50	0,350	1,027	3,163	5,166	7,637	9,585
63	0,436	1,265	3,920	6,416	9,440	11,800
80	0,544	1,561	4,864	7,944	11,664	14,560
100	0,676	1,924	6,031	9,881	14,561	18,200
125	0,840	2,374	7,547	12,357	18,171	22,714
160	1,056	2,956	9,436	15,464	22,736	28,384
200	1,312	3,696	11,744	19,376	28,304	35,472
250	1,616	4,624	14,672	24,224	35,376	44,336
320	1,976	5,792	18,368	30,096	43,712	54,912
400	2,400	7,200	22,912	37,504	54,000	68,000
500	2,976	8,976	28,336	46,880	67,008	84,256
630	3,648	11,136	35,232	58,624	83,616	104,384
800	4,512	13,920	43,776	72,384	102,720	128,000
1000	5,568	17,408	53,984	89,232	126,400	156,800
1250	6,960	21,600	67,312	111,536	155,520	195,200
1600	8,704	27,376	84,608	139,872	194,816	244,160
2000	10,752	33,920	104,960	174,848	243,680	301,760
2500	13,104	41,408	129,472	216,064	298,400	369,280
3200	16,128	51,776	161,936	270,080	372,160	462,080
4000	19,808	64,384	202,432	337,600	465,200	579,840
5000	24,240	79,200	251,936	422,000	581,600	727,360
6300	29,760	98,304	314,912	520,000	722,240	904,960
8000	36,480	122,880	392,384	640,000	889,600	1116,800
10000	44,400	153,600	484,224	792,000	1097,600	1374,400
12500	54,000	192,000	590,720	970,000	1345,600	1683,200
16000	66,240	239,360	727,616	1190,000	1667,200	2092,800
20000	80,640	296,320	897,024	1464,000	2067,200	2611,200
25000	98,400	364,000	1108,000	1800,000	2544,000	3200,000
32000	120,960	442,880	1369,984	2208,000	3110,400	3942,400
40000	148,800	544,000	1702,400	2720,000	3872,000	4864,000
50000	182,400	668,800	2115,328	3360,000	4800,000	6016,000
63000	224,640	827,200	2615,296	4128,000	5936,000	7500,800
80000	275,200	1027,200	3218,624	5056,000	7264,000	9152,000
100000	334,400	1280,000	3943,680	6160,000	8832,000	11104,000
125000	418,000	1592,000	4869,600	7600,000	10960,000	13808,000
160000	508,800	1990,400	5947,904	9280,000	13280,000	16672,000
200000	619,200	2483,200	7299,840	11280,000	16000,000	20096,000
250000	774,000	3104,000	9062,272	13920,000	19904,000	25024,000
320000	940,800	3881,600	11198,976	16800,000	24256,000	30432,000
400000	1142,400	4812,800	13873,600	20160,000	29344,000	36928,000
500000	1428,000	5952,000	17092,000	24200,000	35936,000	45472,000
630000	1753,600	7392,000	21113,216	29760,000	44096,000	56000,000
800000	2140,800	9216,000	26140,160	36000,000	54080,000	68480,000
1000000	2601,600	11456,000	32162,624	43200,000	65920,000	83840,000
1250000	3252,000	14320,000	39703,296	52800,000	80320,000	101760,000
1600000	3984,000	17824,000	48884,096	64320,000	98560,000	124480,000
2000000	4856,000	22272,000	59905,728	78720,000	120640,000	152320,000
2500000	5970,000	27840,000	73687,104	96000,000	147200,000	186880,000
3200000	7296,000	34784,000	90588,928	116160,000	176960,000	224320,000
4000000	8928,000	43424,000	111452,736	140160,000	214080,000	272960,000
5000000	11036,000	53760,000	137816,000	170400,000	262720,000	335040,000
6300000	13672,000	66816,000	169664,000	208000,000	321280,000	409600,000
8000000	16640,000	82752,000	207936,000	252800,000	392000,000	500800,000
10000000	20064,000	102720,000	254016,000	307200,000	476800,000	611200,000
12500000	24540,000	128000,000	312480,000	368000,000	576000,000	737600,000
16000000	29888,000	161280,000	388160,000	444800,000	697600,000	884800,000
20000000	36368,000	201600,000	479360,000	537600,000	841600,000	1059200,000
25000000	44240,000	251200,000	589760,000	648000,000	1008000,000	1270400,000
32000000	53760,000	311040,000	722240,000	787200,000	1222400,000	1532800,000
40000000	65440,000	388160,000	889600,000	950400,000	1481600,000	1865600,000
50000000	80560,000	481280,000	1109760,000	1152000,000	1776000,000	2252800,000
63000000	98400,000	595200,000	1381760,000	1401600,000	2140800,000	2729600,000
80000000	120960,000	739200,000	1709200,000	1680000,000	2593600,000	3296000,000
100000000	148800,000	921600,000	2111200,000	2016000,000	3136000,000	3974400,000
125000000	182400,000	1145600,000	2614400,000	2420000,000	3776000,000	4771200,000
160000000	224640,000	1432000,000	3216800,000	2976000,000	4560000,000	5785600,000
200000000	275200,000	1782400,000	3944000,000	3600000,000	5504000,000	6976000,000
250000000	334400,000	2227200,000	4869600,000	4320000,000	6624000,000	8384000,000
320000000	403200,000	2784000,000	5948800,000	5280000,000	7968000,000	10176000,000
400000000	489600,000	3478400,000	7299200,000	6432000,000	9632000,000	12448000,000
500000000	595200,000	4342400,000	8972800,000	7872000,000	11648000,000	15008000,000
630000000	729600,000	5376000,000	11088000,000	9600000,000	14128000,000	18016000,000
800000000	892800,000	6681600,000	13808000,000	11616000,000	17104000,000	21632000,000
1000000000	1094400,000	8275200,000	17096000,000	14016000,000	20608000,000	26176000,000
1250000000	1337600,000	10272000,000	21120000,000	16800000,000	24672000,000	31072000,000
1600000000	1622400,000	12800000,000	26144000,000	20160000,000	29760000,000	37216000,000
2000000000	1976000,000	15920000,000	32168000,000	24200000,000	35904000,000	44704000,000
2500000000	2409600,000	19904000,000	39440000,000	29760000,000	43616000,000	54784000,000
3200000000	2918400,000	24832000,000	48696000,000	36000000,000	53056000,000	66784000,000
4000000000	3542400,000	31040000,000	59488000,000	43200000,000	64320000,000	81216000,000
5000000000	4288000,000	38816000,000	72224000,000	52800000,000	77600000,000	98016000,000
6300000000	5203200,000	48128000,000	88960000,000	64320000,000	93760000,000	117440000,000
8000000000	6297600,000	59520000,000	110976000,000	78720000,000	113280000,000	141280000,000
10000000000	7603200,000	73920000,000	138176000,000	95040000,000	137440000,000	171840000,000
12500000000	9152000,000	92160000,000	170920000,000	115200000,000	166720000,000	207040000,000
16000000000	11030400,000	114560000,000	211120000,000	140160000,000	201280000,000	252160000,000
20000000000	13376000,000	143200000,000	261440000,000	168000000,000	241760000,000	302720000,000
25000000000	16224000,000	178240000,000	321680000,000	201600000,000	290240000,000	363840000,000
32000000000	19760000,000	222720000,000	394400000,000	242000000,000	348800000,000	436160000,000
40000000000	23904000,000	278400000,000	486960000,000	297600000,000	422400000,000	527360000,000
50000000000	28992000,000	347840000,000	594880000,000	360000000,000	512000000,000	640960000,000
63000000000	35424000,000	434240000,000	729920000,000	432000000,000	618400000,000	777600000,000
80000000000	42880000,000	537600000,000	897280000,000	528000000,000	742400000,000	937600000,000
100000000000	51936000,000	668160000,000	110880000,000	643200000,000	889600000,000	1118400000,000
125000000000	61920000,000	827520000,000	138080000,000	787200000,000	1070400000,000	1337600000,000
160000000000	74016000,000	102720000,000	170960000,000	950400000,000	1283200000,000	1603200000,000
200000000000	88416000,000	128000000,000	211200000,000	1152000000,000	1537600000,000	1926400000,000
250000000000	106720000,000	159200000,000	261440000,000	1401600000,000	1843200000,000	2310400000,000
320000000000	128000000,000	199040000,000	321680000,000	1680000000,000	2201600000,000	2774400000,000
400000000000	154560000,000	248320000,000	394400000,000	2016000000,000	2643200000,000	3321600000,000
500000000000	186880000,000	310400000,000	486960000,000	2420000000,000	3184000000,000	3980800000,000
630000000000	224640000,000	388160000,000	594880000,000	2976000000,000	3840000000,000	4822400000,000
800000000000	275200000,000	481280000,000	722240000,000	3600000000,000	4672000000,000	5849600000,000
1000000000000	334400000,000	595200000,000	889600000,000	4320000000,000	5696000000,000	7078400000,000
1250000000000	403200000,000	739200000,000	110880000,000	5280000000,000	6832000000,000	8598400000,000
1600000000000	489600000,000	921600000,000	138080000,000	6432000000,000	8288000000,000	10310400000,000
2000000000000	595200000,000	114560000,000	170920000,000	7872000000,000	10064000000,000	12448000000,000
2500000000000	719040000,000	143200000,000	211120000,000	9600000000,000	12224000000,000	15008000000,000
3200000000000	864000000,000	178240000,000	261440000,000	11616000000,000	14784000000,000	18272000000,000
4000000000000	1036800000,000	222720000,000	321680000,000	14016000000,000	17824000000,000	22016000000,000
5000000000000	1248000000,000	278400000,000	394400000,000	16800000000,000	21408000000,000	26528000000,000
6300000000000	1510400000,000	347840000,000	486960000,000	20160000000,000	25936000000,000	32032000000,000
8000000000000	1824000000,000	434240000,000	594880000,000	2		