

KM 20/30/60/100-2ME / -3ME KM 20/30/60/100-2ME / -3ME Ex



Gas mixing systems for 2 or 3 defined gases, designed for a variety of industrial applications, particularly for all areas with sharply fluctuating mixed gas extraction quantities.

Capacity range from 0 to approx. 544 Nl/min. For the exact pressure and flow capacity ratios, please see the technical data overleaf.

Benefits

Easy operation

- a proportional mixing valve (-2ME) or three single mixing valves (-3ME), each with a control knob and %-scale, provide infinitely variable mixture settings
- gas mixture withdrawal possible from zero to the maximum flow capacity

High process reliability

- independent of pressure fluctuations in the gas supply
- intermittent gas mixture withdrawal possible
- lockable transparent door for protection of settings
- splash-proof and robust stainless steel housing

Options

- for flammable gases available as Ex-version with separate control cabinet
- alarm module NXT+: integrated inlet pressure monitoring with digital display for pressure (with analog pressure transmitters) plus optical alarm, adjustable alarm limits, obligation of acknowledgement, protection of alarms, interfaces for controlling external alarms etc.
- integrated gas analysis for the monitoring/control and documentation of the gas mixture production
- gas mixer mounted on gas mixture buffer tank for a more convenient installation

Note:

System only works with sufficient buffer volume (20 to 100 litres depending on gas mixing capacity).

Other models, options and accessories available upon request. Please identify the individual gases at the time of enquiring!

Technical Data overleaf

KM 20/30/60/100-2ME / -3ME

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Technical Data	
Type	KM 20/30/60/100-2ME /-3ME KM 20/30/60/100-2ME/-3ME Ex
Gases	all technical gases (excluding toxic and corrosive gases also mixtures of fuel gas with air, O ₂ or N ₂ O)
Mixing range	0-25% (KM 60/100-ME only) or 0-100% by selection of suitable mixing range the accuracy corresponds to ISO 14175
Pressure settings	see tables
Inlet pressure differential between the gases	max. 3 bar
Mixture output (air)	see tables
Setting accuracy	±1% abs. (scale 0-25%), ±2% abs. (scale 0-100%)
Mixing precision	better than ±1% abs.
Gas connections	inlets G 3/8 RH with cone, soldering nipple for pipe OD 10 mm outlet at mixer G 3/8 RH with cone, soldering nipple for pipe OD 10 mm outlet at receiver WITT-Pipe Couplers for pipe OD 12 mm for fuel gas connection and outlet at mixer G 3/8 LH with cone, soldering nipple for pipe OD 10 mm
Housing	stainless steel, splash proof (not Ex-version)
Weight	approx. 18 kg (-2ME), approx. 26 kg (-3ME) without receiver
Dimensions (HxWxD) mixer	approx. 225 x 325 x 345 mm (8.86 x 12.79 x 13.58 inches) (without connections and receiver)
Dimensions (HxWxD) separate control cabinet (Ex)	approx. 212 x 198 x 160 mm (8.35 x 7.79 x 6.30 inches) (without connections)
Voltage	230 V AC, 110 V AC or 24 V DC
Power consumption	230 V AC, 0.07 A
Approvals	Company certified according to ISO 9001 CE-marked according to: - EMC 2004/108/EC - Low Voltage Directive 2006/95/EC - PED 97/23/EC - ATEX 95 Directive 94/9/EC

Flow KM 20 (in NL/min) in relation to air		min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)									
min. inlet pressure in barg (max. 20 bar)		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5
4	21	-	-	-	-	-	-	-	-	-	-
5	27	25	-	-	-	-	-	-	-	-	-
6	33	32	28	-	-	-	-	-	-	-	-
7	38	38	37	31	-	-	-	-	-	-	-
8	44	44	44	41	34	-	-	-	-	-	-
9	50	50	50	48	44	37	-	-	-	-	-
10	55	55	55	55	53	48	39	-	-	-	-
11	61	61	61	61	60	56	51	41	-	-	-
12	66	66	66	66	66	64	60	54	44	-	-
13	72	72	72	72	72	71	68	64	56	46	-

Flow KM 30 (in NL/min) in relation to air		min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)									
min. inlet pressure in barg (max. 20 bar)		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5
4	40	-	-	-	-	-	-	-	-	-	-
5	52	47	-	-	-	-	-	-	-	-	-
6	62	61	54	-	-	-	-	-	-	-	-
7	73	73	70	60	-	-	-	-	-	-	-
8	83	83	83	77	65	-	-	-	-	-	-
9	94	94	94	91	84	70	-	-	-	-	-
10	104	104	104	104	99	90	74	-	-	-	-
11	115	115	115	115	113	107	96	78	-	-	-
12	125	125	125	125	125	121	114	101	83	-	-
13	136	136	136	136	136	134	129	120	107	86	-

Flow KM 60 (in NL/min) in relation to air		min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)									
min. inlet pressure in barg (max. 20 bar)		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5
4	86	-	-	-	-	-	-	-	-	-	-
5	111	102	-	-	-	-	-	-	-	-	-
6	133	131	115	-	-	-	-	-	-	-	-
7	155	155	149	127	-	-	-	-	-	-	-
8	178	178	176	165	138	-	-	-	-	-	-
9	200	200	200	195	179	149	-	-	-	-	-
10	222	222	222	221	212	192	158	-	-	-	-
11	244	244	244	244	240	227	205	167	-	-	-
12	266	266	266	266	266	258	242	216	176	-	-
13	289	289	289	289	289	285	275	256	227	184	-

Flow KM 100 (in NL/min) in relation to air		min. receiver pressure in barg (max. receiver pressure 0.5 bar higher)									
min. inlet pressure in barg (max. 20 bar)		1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	10.5
4	162	-	-	-	-	-	-	-	-	-	-
5	209	191	-	-	-	-	-	-	-	-	-
6	251	247	217	-	-	-	-	-	-	-	-
7	293	293	280	240	-	-	-	-	-	-	-
8	335	335	332	310	261	-	-	-	-	-	-
9	376	376	376	367	337	280	-	-	-	-	-
10	418	418	418	416	399	362	298	-	-	-	-
11	460	460	460	460	452	428	385	315	-	-	-
12	502	502	502	502	500	486	456	407	352	-	-
13	544	544	544	544	544	537	517	482	428	347	-

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