

Price list 2019

Metal tube variable area flowmeter H250
 Instrument size DN15 / 1/2" , accuracy 1.6%

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 H250 - DN 15
 Indicator M40 / M8

Instrument code

V251 4 H250 RR DN 15 / 1/2"

Connection				Connection			
1	DN 10	EN 1092-1		H	1/2" NPT	female thread, screwed to cone	300 mm
2	DN 15	EN 1092-1		K	G 1/2	female thread, screwed to cone	300 mm
3	DN 20	EN 1092-1		L	3/4" NPT	female thread, welded to cone	300 mm
4	DN 25	EN 1092-1		M	G 1	female thread, welded to cone	300 mm
5	DN 50	EN 1092-1		N	1" NPT	female thread, welded to cone	300 mm
7	DN 25	APV-FG		P	JIS 15		
A	1/2"	ASME B16.5		R	JIS 25		
B	3/4"	ASME B16.5		T	DN 15	threaded pipe DIN 11851	300 mm
C	1"	ASME B16.5		U	DN 15	welding ends DIN 11850	300 mm
D	1 1/2"	ASME B16.5		V	DN 25	DIN 32676 clamp	250 mm
E	2"	ASME B16.5		W	NS 25	ISO 2852 clamp	250 mm
F	G 1/2	female thread	welded to cone 300 mm	X	DN 25	threaded pipe DIN 11851	300 mm
G	1/2" NPT	female thread	welded to cone 300 mm	Y	1"	SMS	300 mm
Pressure rating				Pressure rating			
0	w/o (thread conn.)			B	300 lb	ASME B16.5	250 mm
1	PN 40	EN 1092-1	250 mm	C	600 lb	ASME B16.5	< 2": 250 mm, ≥ 2": 300 mm
2	PN 100	EN 1092-1	250 mm	P	10 K	JIS	250 mm
3	PN 160	EN 1092-1	250 mm	R	16 K	JIS	250 mm
7	PN 10	APV	250 mm	S	20 K	JIS	250 mm
A	150 lb	ASME B16.5	250 mm	V	PN 16	Clamp	
Flange facing				Flange facing			
0	w/o (thread connection)			E	shape LF	ASME B16.5	
1	shape B1	EN 1092-1		F	shape SG	ASME B16.5	
3	shape B2	EN 1092-1		G	shape FF	ASME B16.5	
5	groove shape D	EN 1092-1		L	spiral finish - RA 3,2-6,3	ASME B16.5 / EN 1092-1	
6	tongue shape C	EN 1092-1		M	63 - 125 AARH	ASME B16.5 / EN 1092-1	
7	male facing shape E	EN 1092-1		N	125 AARH - 250 AARH	ASME B16.5 / EN 1092-1	
8	female facing shape F	EN 1092-1		P	smooth finish	ASME B16.5 / EN 1092-1	
A	shape RF	ASME B16.5		R	spiral serrated	ASME B16.5 / EN 1092-1	
C	shape RJ	ASME B16.5		S	RA 3,2 +/- 15% - (RA 2,7-3,7)	ASME B16.5 / EN 1092-1	
D	shape LG	ASME B16.5		U	shape RF (JIS)	JIS	
Cone				Cone			
1	K 15.1			G	K 15.1		500 mm
2	K 15.2			H	K 15.2		500 mm
3	K 15.3			K	K 15.3		500 mm
4	K 15.4			L	K 15.4		500 mm
5	K 15.5			M	K 15.5		500 mm
6	K 15.6			N	K 15.6		500 mm
7	K 15.7			P	K 15.7		500 mm
8	K 15.8			R	K 15.8		500 mm
Float				Float			
0	w/o			G	DIV	with gas damping (PEEK)	up to 70°C
1	CIV			H	TIV	with gas damping (PEEK)	up to 70°C
2	DIV			K	DIV T	with gas damping (PEEK)	up to 70°C
3	TIV			L	DIV TR	with gas damping (PEEK)	up to 70°C
4	DIV T			P	DIV TB	SS spring 02 (H/U/1:100 - version)	up to 100°C ***
5	DIV TR			R	DIV TB	SS spring 03 (H/U/1:100 - version)	up to 100°C ***
A	CIV	with damping (ceramic)	up to 150°C***	S	DIV TB	HC spring 22 (H/U/1:100 - version)	up to 200°C ***
B	DIV	with damping (ceramic)	up to 150°C***	T	TIV L	Titan	
C	TIV	with damping (ceramic)	up to 150°C***	U	TIV L	Titan with damping (ceramic)	up to 150°C***
D	DIV T	with damping (ceramic)	up to 150°C***	V	TIV L	Titan with damping (PEEK)	up to 70°C
E	DIV TR	with damping (ceramic)	up to 150°C***	X	TIV	Alu	
F	CIV	with gas damping (PEEK)	up to 70°C	Y	TIV	Alu with damping (PEEK)	up to 70°C
				*** for higher temperatures please contact KROHNE for special device			
Heating				Heating			
0	w/o			3	DN 25 - PN 40	ss 316 ti	
1	heating pipe E12	ss 316 ti		4	1/2" ASME 150 lb RF	ss 316 ti	
2	DN 15 - PN 40	ss 316 ti		5	1" ASME 150 lb RF	ss 316 ti	
Indication				Indication			
E	M40	Standard		K	M40 R	Stainless Steel	
F	M40 HT	extended distance		L	M40 R HT	Stainless Steel, extended distance	
G	M40 S	2-layer coating		M	M40	free of silicone	
H	M40 S HT	2-layer coating, extended distance					
8	M8	DK37 PPS indicator (M8EG or M8MG)		A	M8 R	DK37 stainless steel indicator (M8EG or M8MG)	
Limit switch	function	switch brand M40 (M8M)	SIL	Limit switch	function	switch brand M40	SIL
0	w/o			G	K1 min	3-wire transistor active high (NO)	P+F SB3,5-E2
1	K1 min	NAMUR standard	P+F SC3,5-N0 (SC2-N0)	H	K1 max	3-wire transistor active high (NO)	P+F SB3,5-E2
2	K1 max	NAMUR standard	P+F SC3,5-N0 (SC2-N0)	K	K2 min / max	3-wire transistor active high (NO)	P+F SB3,5-E2
3	K2 min/max	NAMUR standard	P+F SC3,5-N0 (SC2-N0)	N	K1 min	3-wire transistor active low (NC)	P+F SB3,5-E2
5	K1 min	NAMUR standard	IFM I7S23,5-N (I7S2002-N)	P	K1 max	3-wire transistor active low (NC)	P+F SB3,5-E2
6	K1 max	NAMUR standard	IFM I7S23,5-N (I7S2002-N)	R	K2 min / max	3-wire transistor active low (NC)	P+F SB3,5-E2
7	K2 min/max	NAMUR standard	IFM I7S23,5-N (I7S2002-N)	S	R1 MIN	1 Reed (NC) inside M40.HT (HT indicator required!)	
A	K1 min	NAMUR safety	P+F SJ3,5-SN (SJ2-SN)	T	R1 MAX	1 Reed (NC) inside M40.HT (HT indicator required!)	
B	K1 max	NAMUR safety	P+F SJ3,5-SN (SJ2-SN)	U	R2 MIN/MAX	2 Reed (NC) inside M40.HT (HT indicator required!)	
C	K2 min / max	NAMUR safety	P+F SJ3,5-SN (SJ2-SN)	V	K1	1 reed contact MS14 external at cone, 1m cable	
E	K2 min / min	NAMUR safety	P+F SJ3,5-SN/S1N	Y	K2	2 reed contacts MS14, external at cone, 1m cable	
F	K2 max / max	NAMUR safety	P+F SJ3,5-SN/S1N				
Output				Output			
0	w/o			●	ESK4A	(current output incl. HART 7)	SIL
5	M8EG (current output)			D	ESK4-T	(current output / HART 7 + totalizer +I/O + LCD)	
8	ESK preparation	(data recording for later retrofit)		E	ESK4-FF	(Foundation Fieldbus)	
				F	ESK4-PA	(Profibus PA)	

Approval (mechanical version)	Approval (electrical version)	M8 / M8R	M40/40S/40R
0 w/o 3 ATEX II2G, II2D, II3G, II3D 4 ATEX II2G (limited to zone 1) (M40) Approvals (others) - F SIL acc. to IEC 61508 (M40) - G SIL acc. to IEC 61508 + ATEX / IECEx II2G Ex ia (M40) - H SIL acc. to IEC 61508 + ATEX / IECEx II3G Ex nA (M40) - K SIL acc. to IEC 61508 + ATEX / IECEx II2G Ex d [-20...+65°C] (M40) - L SIL acc. to IEC 61508 + ATEX / IECEx II2D Ex t (M40)	0 w/o 5 ATEX / IECEx II2G (zone 1) Ex ia 31 / 31 6 ATEX / IECEx II3G (zone 2) Ex nA 7 ATEX / IECEx II2G (zone 1) Ex d (-20...+65°C) 8 ATEX / IECEx II2G (zone 1) Ex d (-40...+65°C) - C ATEX / IECEx II2D (zone 21) Ex t - S ATEX / IECEx II2G Ex ia (Zone 1 / 21) - A FM - IS (Class I div 1) / (M8:QPS-IS) 31 / 31 - B FM - XP (Class I div 1) incl. DIP (Class II/III div 1) - E FM - NI (Class I div 2) incl. DIP (Class II/III div 1) - W NEPSI Ex-ia 31 / 31 - X NEPSI Ex-d / Ex-t - Y NEPSI Ex-nA		
EAC-Ex = ATEX + Design EAC CCOE/PESO, KCS, INMETRO, others on request			
Options indication	Options indication		
0 w/o 2 Harting plug HAN 7D 3 1/2" NPT adapter for cable conduit 6 Ex-d / Ex-t brass cable glands M20x1,5 7 Ex-d / Ex-t stainless steel cable glands M20x1,5 - A pointer damping	- L Laser engraved stainless steel nameplate - M Laser engraved stainless steel nameplate + st. steel tag (40 x 20 mm) - N Laser engraved stainless steel nameplate + st. steel (120 x 46 mm) - P Laser engraved stainless steel nameplate + paper tag		
Identification	Identification		
0 w/o 1 Stainless steel tag plate (40 x 20 mm) 2 Stainless steel tag plate (120 x 46 mm) - A Paper tag (90x 45 mm) - B Stainless steel tag plate (40 x 20 mm) + paper tag - C Stainless steel tag plate (120 x 46 mm) + paper tag			
Certificate of compliance	Certificate of compliance		
0 w/o	1 2.1 acc. to EN 10204		
Confirmation of accuracy	Confirmation of accuracy		
0 w/o 1 confirm. of measuring accuracy DIN 55 350-18 4. 2.1 2 5 pt. measurement record 3 10 pt. measurement record	4 copy of calculation 5 conf. of meas. accuracy DIN 55 350-18 4. 2.1 + copy of calculation 6 5 pt. measurement record + copy of calc. 7 10 pt. measurement record + copy of calculation		
Pressure- / leakage test	Pressure- / leakage test		
0 w/o 5 pressure test + inspection certificate 3.1 6 pressure test + test report 2.2 acc. to EN10204 7 pressure test acc. to ASME B31.3 + inspection certificate 3.1 - A leakage test + inspection certificate 3.1	- B leakage test + test report 2.2 acc. to EN10204 - F pressure- + leakage test + inspection certificate 3.1 - G pressure- + leakage test + test report 2.2 acc. to EN10204 - H pressure test acc. to ASME B31.3 and leakage test + insp. certificate 3.1		
Material test / -certification	Material test / -certification		
0 w/o 1 list of 3.1 material certificates of pressure bearing, metal parts with copies of the 3.1 material certificates 5 PMI of pressure bearing, metal parts + insp. cert. 3.1 6 PMI / 3.1 + report on measured composition	- F list of 3.1 material certificates of pressure bearing, metal parts with copies of the 3.1 material certificates and PMI - G list of 3.1 material certificates of pressure bearing, metal parts with copies of the 3.1 material certificates and PMI / measured composition - L NACE MR0175/MR0103 (incl. Mat. cert 3.1 and hardness test 3.1) - N NACE MR0175/MR0103 and PMI - P NACE MR0175/MR0103 and PMI / measured composition report		
Dye penetration test (PT)	Dye penetration test (PT)		
0 w/o	1 penetration test PT incl. test report EN ISO 3452-1 - A penetration test PT incl. test report ASME		
Radiographic examination (RT)	Radiographic examination (RT)		
0 w/o	1 x-ray test of pressure bearing parts incl. test report DIN EN ISO 17636-1 - A x-ray test of pressure bearing parts incl. test report ASME V + B31.3		
Hardness test	Hardness test		
0 w/o	1 Hardness test on pressure bearing parts + inspection cert. 3.1		
Final cleaning	Final cleaning		
0 w/o - K Final cleaning "Standard" + 2.1 CoC - L Final cleaning "Standard" + 3.1 inspection certificate	- N Final cleaning for oxygen services + 2.1 CoC - P Final cleaning for oxygen services + 3.1 inspection certificate		
Design	Design		
0 KROHNE Standard ... Private Label Versions possible	- L EAC marking for Russia - M EAC marking for Kazakhstan - N EAC marking for Belarus		
Flow options	Flow options (max. process temp.: Stainless steel spring 100°C, HC spring 200°C)		
0 standard (bottom to top) 5 zero point (RP) elevation of float to approx. 10% (for safety backflow)	1 horizontal from left to right 2 horizontal from right to left 3 vertical from top to bottom 4 Increased measuring range 100:1 (bottom to top)		
Manual	Manual		
0 w/o 1 German	3 English 4 French		

Test and documentation costs for projects with significant quantities can be calculated differently. Please ask KMT.

DN15
1/2"



H250 Standard



M40R Indication



M40 Indication
with ESK4-T



Net price adders for frequent specials are in the spare part price book page 47ff.

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