



Steering - arm flap - SPECIFICATION



TAG-No. : **UK 15012/014/022/024** Piece : **4**

Denomination : Electro-pneumatically controlled Steering lever flap

Type : **PKIII** DN **600** PN **10**
Publication : **B 0119** Inst. length: **600 mm**
Testing : **Works certification** Flanges : **DIN2632-C**
placement : **Horizontal**

Operating data

Flow medium	: Nitrogen	Allwd. oper. Pressure	: 10 (static)	bar	
Inlet pressure	: 1.02	bara	Allwd. oper. temp.	: +220	°C
Opening pressure	: 0,1-0,3	barü	Allwd. ambient temp.	: - 15 + 60	°C
Medium temperature	: 100	°C	Control air pressure	: 3,5 - 8	bar
Control voltage	: 24	VDC			Hz

Set -Function : Function 1: Valve without pneum. energy – hold in the position
Function 2: Valve without electrical energy – 5/2 Way solenoid valve without electrical energy – flap valve closed.
The opening time and closing time can be adjusted with the throttle valves

Materials : Body / flap disk : ☒ Welded steel construction WAZ n. DIN 50049 3.1B
Shaft and actuating bolt: stainless steel **1.4057**
Flap disk gasket : ☒ **Silicon red**
Shaft sealing: Double sealing by O – Ring with test connection G 1/8
Shaft bearing: Maintenance-free PTFE friction bearings
Shaft bearing and bolt bearing on the inside sealing by O-Ring against dust
Seat ring: stainless steel

Actuator : Piston **double acting**, piston diameter **200** mm
Cylinder-pipe from steel, chem. nickel-plated.

Other components : Pressure reducing station with back pressure manometer
Included : Range of adjustment 0-8 barü

1	Pcs	5/2-Way-Solenoid valve G 1/4	Type:	9710535.0763	Make:	Herion
		Protection class :	<input checked="" type="checkbox"/> IP65,	<input type="checkbox"/> Ex	Power consump. :	<input type="checkbox"/> W/VA
		Special features :	External control air connection			
	Pcs	Quick exhaust valve	Type:		Make:	
2	Pcs	Limit switches	<input checked="" type="checkbox"/> On <input checked="" type="checkbox"/> Off	<input checked="" type="checkbox"/> Mechanical	Inductive	<input type="checkbox"/> Ex
		Type :	NJ6-22-SN-G	Make :	P&F	Protective class <input checked="" type="checkbox"/> IP68
		Special features :				
Contr. connections with	:	<input checked="" type="checkbox"/> Air bottle	<input type="checkbox"/> Connector Han,	<input checked="" type="checkbox"/> Needle valve	G1/4	
Cabling	:	<input type="checkbox"/> Without	<input type="checkbox"/> Connector Han,	<input type="checkbox"/> Terminal box IP65,	<input type="checkbox"/> Ex	
			<input type="checkbox"/> Only limit switch	<input type="checkbox"/> Limit switch & solenoid valve		
Control-connections:	<input checked="" type="checkbox"/>	Standard: Flexible hoses				
	<input type="checkbox"/>	Complete stainless steel 1.4571	<input checked="" type="checkbox"/>	Fitting stainless steel		
Painting	:	<input checked="" type="checkbox"/> Kühme-standard		Customers specification		

Notes :
Cleaned, oil and grease free
Isolation = 100 mm

				Specification Control Valves				TAG - No.: UK15012			
				Project: ASU No. 9 KOSICE				Project No.: K70101			
Air Liquide AGS GmbH								Designation: OUTLET REGENGAS ADSORBER A			
<input type="checkbox"/> Globe <input checked="" type="checkbox"/> Butterfly <input type="checkbox"/> Cock <input type="checkbox"/> Gate								Combination with TAG-No.: _____			

Rev.								Rev.						
		Line - No.	600N-15010-AA10C1W							Manufact.		Type	digital	
		Equipment - No								max. allow. air pressure (g)	6 bar			
		DN	600	PN	10	Material	St 37			Input signal	open	20	mA	bar
		Flanges	DIN		Gasket	Form C				Input signal	close	4	mA	bar
		Taps			Material					<input type="checkbox"/> Explosion proof	Load	< 400 Ω		
		Medium	NITROGEN							Enclosure class of all accessory devices	IP 65 / NEMA 4X			
		Composition								Manufact.	P&F	Type	NJ6-22-SN-G	
		Normal density	kg/m³	1,2504						Position	<input type="checkbox"/> open	<input type="checkbox"/> close		
		State inlet	<input type="checkbox"/> liquid		<input checked="" type="checkbox"/> gaseous	<input type="checkbox"/> vaporous				Switch type	<input type="checkbox"/> contact	<input type="checkbox"/> inductive	<input type="checkbox"/> pneumatic	
		State outlet	<input checked="" type="checkbox"/> eq. inlet		<input type="checkbox"/> % vaporization				State at end position	<input type="checkbox"/> on/alive	<input type="checkbox"/> off/dead			
		Operation case	case 1	case 2	case 3					Enclosure class of all accessory devices	IP 65 / NEMA 4X			
		Flow	Nm³/h	18000	18000	18000			<input checked="" type="checkbox"/> See specification solenoid valve					
		P ₁ (abs.)	bar	1,020	1,020	1,020			Manufact.	Herion	Type	2636097.0763		
		P ₂ (abs.)	bar	1,015	1,015	1,015			Power supply	24 VDC	Hz	bar		
		Temperature t _i	°C	99,9	99,9	99,9			without power	<input type="checkbox"/> deaerated	<input type="checkbox"/> aerated			
		Operat. density	kg/m³	0,92	0,92	0,92			<input type="checkbox"/> Explosion proof	Power consumption	< 7 W			
		Border case	min		max				Enclosure class of all accessory devices	IP 65 / NEMA 4X				
		Allowed op. press.	bar (a)			7			<input checked="" type="checkbox"/> Pressure reducing station	Fisher 67CFR				
		Allowed op. temp.	°C	-25		220			Air connections	G1/4" tube fittings, stainl. steel				
		Ambient temp.	°C	-25		35			Air tube material	stainl. steel				
		Manufact.	Kühme	Type	PK III				<input type="checkbox"/> Volume booster	Type				
		Design	steering arm flap											
		K _v calculated	10616,2 / 10616,2	K _{vs}	20000,00				<input type="checkbox"/> Electric actuator	<input type="checkbox"/> Level	<input type="checkbox"/> Push drive			
		Leak quantity	acc. EN 12266-1 leak rate A						Rated torque	Nm	Moving time	s		
		Seat φ	mm	Actuator ratio K _{vs} /K _{vr}					<input type="checkbox"/> Capacitor connection device	<input type="checkbox"/> Tacho sensor				
		DN	600	PN	10	Material	CS		<input type="checkbox"/> Feedback transm	4-20 mA	<input type="checkbox"/> 2-wire	<input type="checkbox"/> 4-wire		
		Flanges	DIN		Gasket	Form C			Power supply	V	50 Hz			
		Inst. length	600				mm		<input type="checkbox"/> with cold box hood acc. spec. SP01DE02					
		Charact.	<input type="checkbox"/> VDI/DE 2176	<input type="checkbox"/> linear	<input type="checkbox"/> equ.-%	<input checked="" type="checkbox"/> op./cl.			Enclosure class of all accessory devices	IP 65 / NEMA 4X				
		Seat type	<input type="checkbox"/> single	<input type="checkbox"/> double	<input type="checkbox"/> three way				Cable glands	M20				
		Plug type	disk											
		Gasket	<input type="checkbox"/> metallic	<input checked="" type="checkbox"/> soft	Material	sili.-kaut.			<input checked="" type="checkbox"/> Cleaned, oil and grease free acc. Standard 06401					
		Seat material	1.4571		<input type="checkbox"/> Plating				<input type="checkbox"/> Cleaned, oil and grease free acc. manufacturer's standard					
		Plug material			<input type="checkbox"/> Plating				<input checked="" type="checkbox"/> max. sound power level L _W acc. VDMA 24422	85 dB(A)				
		Plating material							<input type="checkbox"/> Indication of L _W in octave spectrum acc. VDMA 24422					
		Kind of plating	<input type="checkbox"/> chamfe		<input type="checkbox"/> surface	<input type="checkbox"/> full			<input type="checkbox"/> AD 2000-leaflet					
		Stuffing box	<input checked="" type="checkbox"/> self adjusting		<input type="checkbox"/> adjustable				<input checked="" type="checkbox"/> Material certificate EN 10204 - 3.1.B					
		Stuffing box packing	PTFE						<input checked="" type="checkbox"/> EN 558/1 bzw. EN 12982 (Inst. Length)					
		<input type="checkbox"/> Bellows	<input type="checkbox"/> Extension		A =	mm			<input checked="" type="checkbox"/> EN 12266/1, DIN 3230/5 (Leak Test)					
		<input type="checkbox"/> Cooling fins	<input type="checkbox"/> Seal gas connection						<input checked="" type="checkbox"/> UVV-Gase					
		<input type="checkbox"/> Install. position	(spindle axis to horizontal)						<input type="checkbox"/> UVV-Sauerstoff					
									<input checked="" type="checkbox"/> Packed acc. Standard 06271					
		Manufact.	Kühme	Type	piston				<input checked="" type="checkbox"/> Indication of TAG - Nr. on the type plate					
		<input checked="" type="checkbox"/> pn, <input type="checkbox"/> el, <input type="checkbox"/> hydr.	Diaphragm area		cm²				<input checked="" type="checkbox"/> CE-marking and CE-conformity certificate					
		Air supply	3.5 bar(g)	Travel	mm				<input checked="" type="checkbox"/> Design acc. Pressure Equipment Directive 97/23/EG					
		Valve without pneum. energy	<input type="checkbox"/> open	<input checked="" type="checkbox"/> hold	<input type="checkbox"/> close				- actuator opens against diff. pressure of 0,1...0,3 bar - control acc. HU_V13					
		Valve without electr. energy	<input type="checkbox"/> open	<input type="checkbox"/> hold	<input checked="" type="checkbox"/> close									
		Open way of 3 way valve without energy												
		Spring rate	<input type="checkbox"/> 0,2-1 bar	<input type="checkbox"/> 0,4-2 bar										
		<input type="checkbox"/> Hand operate	<input type="checkbox"/> top	<input type="checkbox"/> lateral										
		Operation cycles												
		Moving time												
		Valve seals at both pressure directions												
		at ΔPmax =	bar											
0	19.01.2005	Möller	Eichler	Initial Version	1	01.02.2005	Möller	Eichler	Order Spec.					
Rev.	Date	Name	Checked	Change	Rev.	Date	Name	Checked	Change					

AIR LIQUIDE				Specification Control Valves				TAG - No.: UK15014			
Air Liquide AGS GmbH				Project: ASU No. 9 KOSICE				Project No.: K70101			
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Rev.		Location		Rev.		Positioner		Limit switch		Solenoid valve		Accessories		Certificates		Remarks
1		Line - No.	600N-15006-AA10C1W	55		Manufact.		Type	digital							
2		Equipment - No		56		max. allow. air pressure (g)			6 bar							
3		DN	600	57		Input signal	open	20	mA							
4		Flanges	DIN	58		Input signal	close	4	mA							
5		Taps		59		<input type="checkbox"/> Explosion proof		Load	< 400	Ω						
6		Medium	NITROGEN	60		Enclosure class of all accessory devices			IP 65 / NEMA 4X							
7		Composition		61		Manufact.	P&F	Type	NJ6-22-SN-G							
8		Normal density	kg/m³	62		Position	<input type="checkbox"/> open	<input type="checkbox"/> close								
9		State inlet	<input type="checkbox"/> liquid <input checked="" type="checkbox"/> gaseous <input type="checkbox"/> vaporous	63		Switch type	<input type="checkbox"/> contact <input type="checkbox"/> inductive <input type="checkbox"/> pneumatic									
10		State outlet	<input checked="" type="checkbox"/> eq. inlet <input type="checkbox"/> % vaporization	64		State at end position	<input type="checkbox"/> on/alive <input type="checkbox"/> off/dead									
11		Operation case	case 1	65		Enclosure class of all accessory devices			IP 65 / NEMA 4X							
12		Flow	Nm³/h	66		<input checked="" type="checkbox"/> See specification solenoid valve										
13		P ₁ (abs.)	bar	67		Manufact.	Herion	Type	2636097.0763							
14		P ₂ (abs.)	bar	68		Power supply	24 VDC	Hz								
15		Temperature t ₁	°C	69		without power	<input type="checkbox"/> deaerated <input type="checkbox"/> aerated									
16		Operat. density	kg/m³	70		<input type="checkbox"/> Explosion proof		Power consumption	< 7	W						
17		Border case	min	71		Enclosure class of all accessory devices			IP 65 / NEMA 4X							
18		Allowed op. press.	bar (a)	72		<input checked="" type="checkbox"/> Pressure reducing station	Fisher 67CFR									
19		Allowed op. temp.	°C	73		Air connections	G1/4" tube fittings, stainl. steel									
20		Ambient temp.	°C	74		Air tube material	stainl. steel									
21		Manufact.	Kühme	75		<input type="checkbox"/> Volume booster	Type									
22		Design	steering arm flap	76		<input type="checkbox"/> Electric actuator		<input type="checkbox"/> Level	<input type="checkbox"/> Push drive							
23		K _V calculated	10616,2 / 10616,2	77		Rated torque	Nm	Moving time	s							
24		Leak quantity	acc. EN 12266-1 leak rate A	78		<input type="checkbox"/> Capacitor connection device		<input type="checkbox"/> Tacho sensor								
25		Seat φ	mm	79		<input type="checkbox"/> Feedback transm	4-20 mA	<input type="checkbox"/> 2-wire	<input type="checkbox"/> 4-wire							
26		DN	600	80		Power supply	V	50	Hz							
27		Flanges	DIN	81		<input type="checkbox"/> with cold box hood acc. spec. SP01DE02										
28		Inst. length	600	82		Enclosure class of all accessory devices			IP 65 / NEMA 4X							
29		Charact.	<input type="checkbox"/> VDI/DE 2176 <input type="checkbox"/> linear <input type="checkbox"/> equ.-% <input checked="" type="checkbox"/> op./cl.	83		Cable glands			M20							
30		Seat type	<input type="checkbox"/> single <input type="checkbox"/> double <input type="checkbox"/> three way	84		<input checked="" type="checkbox"/> Cleaned, oil and grease free acc. Standard 06401										
31		Plug type	disk	85		<input type="checkbox"/> Cleaned, oil and grease free acc. manufacturer's standard										
32		Gasket	<input type="checkbox"/> metallic <input checked="" type="checkbox"/> soft	86		<input checked="" type="checkbox"/> max. sound power level L _{Wacc} VDMA 24422	85	dB(A)								
33		Seat material	1.4571	87		<input type="checkbox"/> Indication of L _W in octave spectrum acc. VDMA 24422										
34		Plug material		88		<input type="checkbox"/> AD 2000-leaflet										
35		Plating material		89		<input checked="" type="checkbox"/> Material certificate EN 10204 - 3.1.B										
36		Kind of plating	<input type="checkbox"/> chamfer <input type="checkbox"/> surface <input type="checkbox"/> full	90		<input checked="" type="checkbox"/> EN 558/1 bzw. EN 12982 (Inst. Length)										
37		Stuffing box	<input checked="" type="checkbox"/> self adjusting <input type="checkbox"/> adjustable	91		<input checked="" type="checkbox"/> EN 12266/1, DIN 3230/5 (Leak Test)										
38		Stuffing box packing	PTFE	92		<input checked="" type="checkbox"/> UVV-Gase										
39		<input type="checkbox"/> Bellows <input type="checkbox"/> Extension	A =	93		<input type="checkbox"/> UVV-Sauerstoff										
40		<input type="checkbox"/> Cooling fins <input type="checkbox"/> Seal gas connection		94		<input checked="" type="checkbox"/> Packed acc. Standard 06271										
41		<input type="checkbox"/> Install. position	(spindle axis to horizontal)	95		<input checked="" type="checkbox"/> Indication of TAG - Nr. on the type plate										
42				96		<input checked="" type="checkbox"/> CE-marking and CE-conformity certificate										
43		Manufact.	Kühme	97		<input checked="" type="checkbox"/> Design acc. Pressure Equipment Directive 97/23/EG										
44		<input checked="" type="checkbox"/> pn. <input type="checkbox"/> el. <input type="checkbox"/> hydr.	Diaphragm area	98												
45		Air supply	3.5 bar(g)	99												
46		Valve without pneum. energy	<input type="checkbox"/> open <input checked="" type="checkbox"/> hold <input type="checkbox"/> close	100												
47		Valve without electr. energy	<input type="checkbox"/> open <input type="checkbox"/> hold <input checked="" type="checkbox"/> close	101												
48		Open way of 3 way valve without energy		102												
49		Spring rate	0,2-1 bar	103												
50		<input type="checkbox"/> Hand operate <input type="checkbox"/> top <input type="checkbox"/> lateral		104												
51		Operation cycles		105												
52		Moving time		106												
53		Valve seals at both pressure directions		107												
54		at ΔPmax =	bar	108												

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Rev.	Date	Name	Checked	Change	Rev.	Date	Name	Checked	Change

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