



## Butterfly Valve

PSP-No.	DTI
<b>5780</b>	<b>CT</b>

WEG-0122-21976435	Rev. 00	1	4
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Project Title	<b>Krško SFP Alternative Cooling Design</b>
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Power plant / unit

**KRK - KRSKO 1**

Number of Modification/ Action
<b>1028-SF-L</b>

Tag number

**See TAG list on page 1**

Referenced identical Components - List of TAGs

SF10200001  
SF10200002  
SF10200003  
SF10200004  
SF10200005  
SF10200006  
SF10200007  
SF10200031



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Power plant / unit <b>KRK - KRSKO 1</b>	Number of Modification/ Action <b>1028-SF-L</b>		Tag number <b>See TAG list on page 1</b>		

General Data			
Valve model (funct.)	on/off with flow control function	Related specification	ASME Sect. III, ND
Valve type (constr.)	butterfly valve	Additional specification *2	
Manufacturer - type *1		Component class / performance level	SC3
Supplier *1		Load level *6	
Building *3		Seismic class	Category I
Floor/level *3		Test Group *7	
Room number *3		Test category	-
Related cover sheet	not applicable	Nominal width DN *4	6"
Related P&ID	WEG-0180-05648804	Nominal pressure PN	300
Related drawing *1		Nominal width DN Exit *4	6"
Related system	SFP Spray System	Nominal pressure PN Exit	300
Safety Requirement	Yes	Actuator model	manual
Safety devices *1		Type of drive	-

Design Data			
Design Pressure	232	psi (g)	Design against External impact *8
Design temperature	212	°F	Design against Internal impact *9
Ambient temperature min.	61	°F	Design against LOCA
Ambient temperature max.	212		Design against cutoff failure
Design mass flow	82.8	kg/s	Proof: Stability
Test Pressure	290	psi (g)	Proof: Integrity
Test Temperature	RT	°F	Proof: Functionality *10

Operating Data			
Operating pressure (gauge)	116	psi (g)	Function at $\Delta p$ / basic position
Operating temperature min.	33.1	°F	Pressure below / above cones *11
Operating temperature max.	95		Safety valve opening pressure
Operating mass flow	38.7	kg/s	Pressure (gauge) supply of compressed air for actuator
Max. differential pressure $\Delta p$	232	psi (g)	

Technical Data			
Weight excluding actuator *1		kg	Dimensions (L/H/W) *1
Weight including actuator *1		kg	in in in
Valve stiffness	-		Seat hard facing available *1

Material Data			
Housing *12		Spindle seal *13	
Housing coating internal	-	Obturator *14	
Housing coating external	-	Shutoff element / armor plate	-
Vessel head *12		Seat hard facing *15	
Gasket ring (body/cover) *1		Weld-on / shoed butt weld ends	-
Spindle *1		Actuator housing *1	
Spindle nut	-		



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Medium Data							
Medium	*16			Dynamic viscosity	1	mPa*s	
Activity	-	Bq/m3		Density	994	kg/m³	
Solids content	-	%		Hazard class	-		
Steam content	-	%		Water hazard class	-		
Conductivity	-	S/m		Additive	-		
Test medium	Water			Resistance value (Zeta-Value)	-		
Acceptance							
Acceptance test according to		*2 Sec. 6.0					
Accessory							
Additional accessories		*1		Housing rupture protection	*1		
Construction Data							
Connection inlet	*17			Permitted leakage to the outside	*19	mbar*U/s	
Connection outlet	*17			Seating tightness	*20		
Installation position	*18			Middle seat diameter / seat width	*1	in	
Suspension	-			Spindle diameter/pitch/number of gears	*1		
Spindle seal / shaft seal	*1 *5			Insulation type	-		
Spindle stroke	*1		in	Insulation thickness	-	in	
Gland leak off	-			Coating inside	-	µm	
Locking	No			Coating on the outside	-	µm	
Limit switch	No			Safety devices-version	-		
Actuator							
Manufacturer	*1			Voltage	-	V	
Manufacturer - type	Hand operated			Frequency	-	Hz	
Connection type	*1			Nominal power	-	hp	
Installation position (motor shaft)	*18			Nominal current	-	A	
Output shaft version	-			Starting current	-	A	
Adjustment range OPEN min. /max.	-	-	N*m	Start-up suppression OPEN	-	%	
Adjustment range CLOSE min. /max.	-	-	N*m	Start-up suppression CLOSE	-	%	
Set torque OPEN	-		N*m	Revolutions per stroke (stroke)	-	in	
Set torque CLOSE	-		N*m	Revolutions per stroke (rotation angle)	-	°	
Shut off OPEN	-			Torque tolerance	-	%	
Shut off CLOSE	-			Actuating time	-	s	
Shutdown failure moment OPEN	-		N*m	Speed of drive	-	1/min	
Shutdown failure moment CLOSE	-		N*m	Remote drive parts available	-		
Cut-off delay	-		ms	Slip clutch	-		
Self-locking	Yes						
Gearing							
Manufacturer	-			Permitted torque (input)	-	N*m	
Manufacturer - type	-			Permitted torque (output)	-	N*m	
Gear ratio (i)	-			Remote drive angle	-	°	
Transmission efficiency	-			Remote drive (construction)	-		



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Reference to calculations and applicable codes and/or standards

### Annotations

- \*1 - To be provided by supplier /
- \*2 - WEG-0122-60669672 valve specification /
- \*3 - 00005 - 7, outside, el. 100.3 m / 00001, AB, room ??, el. 115.55 / 00002 - 4, FHB, room 13, el. 100.3/ 00031, FHB, room 01 el. 116.04 /
- \*4 - Connected Piping: Material ASTM A312 Grade TP304, Dimensions ASME B36.19, Sch. 40S, 168.3 x 7.11 mm (6.625 x 0.280 in) /
- \*5 - Sections 5.1.1 - 5.1.10 shall be considered as applicable /
- \*6 - acc. to \*2 App. C /
- \*7 - Nonactive (acc. to \*2 Section 3.4.3.4) /
- \*8 - Yes (see \*2 Sec. 3.4.3) /
- \*9 - Yes (see \*2 Sec. 3.3) /
- \*10 - Yes (after earthquake) /
- \*11 - Pressure before / behind disc: 16 bar / 0 bar /
- \*12 - SS, \*2 Sec. 5.2 /
- \*13 - \*1 consider \*2 Sec. 3.2.11 /
- \*14 - SS \*1 /
- \*15 - \*2 Sec. 5.2.1.3 /
- \*16 - WF-2/WF-3 (acc. to \*2 App. D) /
- \*17 - Flanged (see \*2 Sec. 4.2.1) /
- \*18 - Horizontal or vertical /
- \*19 - \*2 Sec. 6.3.1.1 /
- \*20 - \*2 Sec. 6.3.1.2 /

Creator				Reviewed WEG			Release / Certification mark
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00	EEC F. Steiner 22.09.2015	ZQ E. Mauermann 25.09.2015	Revision object for workflow-based revis ioning	EEC T. Schuler 22.09.2015			EEP M. Postleb 28.09.2015