Ball Sector Motor Valve 4030

DN 25 up to DN 300

- DN 25 up to DN300
- High Kv-values up to 3840
- Excellent control characteristics
- Suitable for abrasive media
- Easily exchangeable seat ring
- Low maintenance
- Actuators can be easily fitted
- Efficient and easy to install
- optional with face to face dimension acc. ANSI ISA 75.08.02

Packing tested according to TA-Luft as defined in DIN EN ISO 15848-1 and VDI 2440

Technical Information Valve

Design		DN 25 - DN 250 flangeless wafertype DN 300 flange connection
Nominal sizes		DN 25 up to DN 300
Body material	cast parts turned parts	1.4408 (CF8M) 1.4404 (316L)
Bearing material		high temperature plain bearing (Iglidur Z)
Connection to the actuator		mounting kit DIN/ISO 5211
Nominal pressure	DN 25 - DN 50 DN 80 - DN100 DN 150 - DN 300	PN40 (for flanges PN 10 - PN 40), ANSI300, ANSI150 PN25 (for flanges PN 10 - PN 25), ANSI150 PN16 (for flanges PN 10 - PN 16), ANSI150
Fluid Temperature		-40°C up to +220°C according to the sealings
Ambient temperature		-40°C up to +80°C according to the acuator special version on request
Characteristic		almost equal percentage
Rangeability		100:1

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Valve sizes, Kvs-Values, Torques

DN	Kvs	hole mm	rotation angle nominal *	max. press. nomial DIN	max. press. nomial ANSI	req. torque [Nm] (control)	mounting kit DIN/ISO series 1	mounting kit DIN/ISO series 2
25-50%	12,5	15	65°	PN40	ANSI 300	25	F04/SW11	F05/SW14
25	21	19	90°	PN40	ANSI 300	25	F04/SW11	F05/SW14
40-50%	34	25	60°	PN40	ANSI 300	50	F05/SW14	F07/SW17
40	64	32	90°	PN40	ANSI 300	50	F05/SW14	F07/SW17
50	94	40	90°	PN40	ANSI 300	50	F05/SW14	F07/SW17
80	255	64	90°	PN25	ANSI 150	100	F07/SW17	F10/SW22
100	390	80	90°	PN25	ANSI 150	150	F07/SW17	F10/SW22
150	810	120	90°	PN16	ANSI 150	250	F10/SW22	F12/SW27
200	1365	155	90°	PN16	ANSI 150	350	F12/SW27	F14/SW36
250	2220	195	90°	PN16	ANSI 150	600	F12/SW27	F14/SW36
300	3840	250	90°	PN16	ANSI 150	1500	F14/SW36	F16/SW46

* All Valves can be rotated 90° when actuated.
Though for valves with reduced bore holes a smaler angle of rotation is sufficient.

Valve seat combinations

Seat ring	Ball sector	Leakage	min. temp [°C]*
PTFE	stainless steel polished or hard chrome plated or lapped	$5x10^{-7}$ of max. Kvs	-40 up to +170°C
PEEK	stainless steel polished or hard chrome plated or lapped	$5x10^{-7}$ of max. Kvs	-40 up to +220°C
Stellit	stainless steel, hard chrome plated and lapped	Class IV-S1 acc. EN 1349 (IEC 534-4) $5x10^{-6}$ of max. Kvs	-40 up to +220°C
PTFE	stainless steel, hard chrome plated and lapped	Class VI acc. EN 1349 (IEC 534-4)	-40 up to +170°C
Stellit	stainless steel, hard chrome plated and lapped, seat holding ring hard chrome plated	$5x10^{-6}$ of max. Kvs	-40 up to +220°C

* Please note the restrictions of the o-ring material!

Shaft seals (o-ring)

	min. temp [°C]	max. temp [°C]	comment
Viton (Standard)	-15	200	
EPDM	-40	140	suitable for steam
NBR (P700)	-30	100	
FFKM (Perlast/Kalrez)	-15	220	suitable for steam

special material on request

Working pressure max.

Nominal size	maximum differential pressure (delta p)									
DN	seat ring PTFE			seat ring PEEK				seat ring Stellit		
	up to 80°C bar	120°C bar	170°C bar	up to 80°C bar	120°C bar	170°C bar	220°C bar	up to 80°C bar	170°C bar	220° C bar
25-50	25	16	6	40	40	25	16	40	40	25
80-100	16	12	5	25	25	16	10	25	25	16
150-300	16	12	4	16	16	12	8	16	16	12

Ordering Number System

Ordering Number: 4030/ ___ ___ ___ ___ ___ ___ ___ M ___ ___ ___ ___ ___ Z ...

Nominal Size	
e.g. DN 25 = 025	xxx

Article	
valve	V
repair-kit	R
seat kit	D

Connection	
flangeless design according DIN EN 1092-1	1
flangeless design according ASME B 16.5, ANSI 150	E
flangeless design according ASME B 16.5, ANSI 300	F
flangeless design for flange ASME B 16.5, ANSI 150, fitting length acc. ANSI ISA-75.08.02	M
flangeless design for flange ASME B 16.5, ANSI 300, fitting length acc. ANSI ISA-75.08.02	N

Body material	
stainless steel 1.4408 / 1.4404	1

Material combination	
seat ring: PTFE; ball sector: 1.4408, polished	1
seat ring: PTFE; ball sector: 1.4408, hard chrome plated	A
seat ring: Stellit; ball sector: 1.4408, hard chrome plated and lapped	B
seat ring: PTFE; ball sector: 1.4408, hard chrome pated and lapped	E
seat ring: TECAPEEK; ball sector: 1.4408, hard chrome plated	P

Seal combination	
all seals (part 13-16) from VITON, medium temperature: -15°C to +200	1
all seals (part 13-16) from FFKM (Perlast/Kalrez), medium temperature: -15°C to +220°C	A
all seals (part 13-16) from EPDM, medium temperature: -30°C to +140°C	D
all seals (part 13-16) from NBR(P700), medium temperature: -40°C to +100°C	N

Actuator	
without mounting kit, without actuator	0
without actuator, with standard mounting kit according DIN/ISO 5211	1
electrical rotary actuator (on/off, 3-point) PS-Automation, type PSQ, IP65	3
electrical rotary actuator (on/off, 3-point) RemoteControl, type RCEL, IP67	4
electrical rotating actuator (control), IP67, position electronics with feedback 0/4-20mA bzw. 0/1-0V	J
electrical rotating actuator (on/off), IP67	K
electrical quarter turn actuators (control), PS-Automation, type PSQ-AMS, IP65	P
electrical quarter turn actuators (control), RemoteControl, type RCEL, IP67	R

Actuator mounting:	
standard	0

Motor voltage:	
230V 50/60Hz	-
24V AC	1
24V AC/DC	2
24V DC	3
115V AC	4

Special version:	
without	M

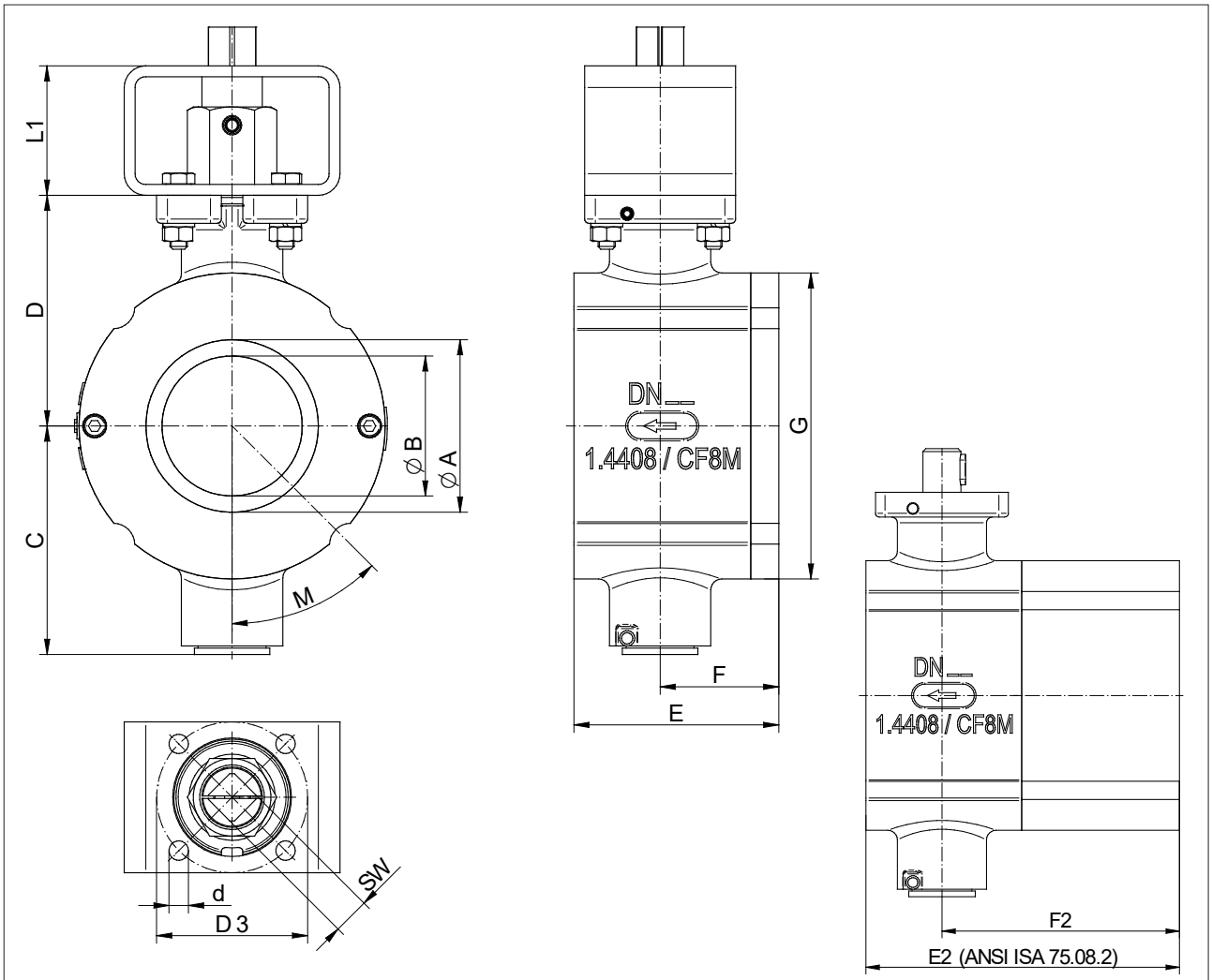
Safety position	
without safety position	-
safety position closed at power failure, power failure cutout (PSCP) for PSQ-AMS rotating actuators	1

Control signal	
standard	-

Limit switches and feedback	
standard (see motor data sheet)	-
feedback over potentiometer 1000 Ohm at on/on actuators	3

Kvs-Value	
100%	-
50%	1

Dimensions without actuator (with mounting kit ISO 5211)



DN	A	B	C	D	E	F	G	L1	d	D3	SW	DIN/ISO 5211
25	25	20	73	74	50	25,5	73	60	6,6	50	14	F 05
40	41	32	79	80	58	30,5	94	60	6,6	50	14	F 05
50	53	40	82	83	71	37,5	112	60	6,6	50	14	F 05
80	80	65	106	107	95	54,5	142	60	9	70	17	F 07
100	100	80	117	118	112	64,5	174	60	9	70	17	F 07
150	150	120	155	156	170	94	220	80	11	102	22	F 10
200	200	155	184	185	210	119	280	80	13,5	125	27	F 12
250	250	195	228	229	270	143	329	80	13,5	125	27	F 12

DN	E2	F2	
25	102	78	ANSI ISA 75.08.2
40	114	87	
50	124	91	
80	165	125	
100	194	144	
150	229	154	
200	242	152	
250	298	173	

Dimensions of the valves incl. actuators on request.

Dimension in mm