

Ball Sector Motor Valve 4030

1" up to 12"

- high Cv-values up to 4454
- Excellent control characteristics
- Suitable for abrasive media
- Easily exchangeable seat ring
- Low maintenance
- Actuators can be easily fitted
- Efficient and easy to install



Technical Information Valve

Design	1" - 10" flangeless wafertype 12" flange connection	
Nominal sizes	1" up to 12"	
Body material	cast parts	CF8M (1.4408)
	turned parts	316L (1.4404)
Bearing material	high temperature plain bearing (Iglidur Z)	
Cutting site to the actuator	mounting kit DIN/ISO 5211	
Nominal pressure	1" - 2"	ANSI300, ANSI150, 580 psi (for flanges 145 psi - 580 psi)
	3" - 4"	ANSI150, 365 psi (for flanges 145 psi - 365 psi)
	6" - 12"	ANSI150, 235 psi (for flanges 145 psi - 235 psi)
Fluid Temperature	-76°F up to +446°F according to the sealings	
Ambient temperature	-40°F up to +176°F according to the acuator	
	special version on request	
Characteristic	almost equal percentage	
Rangeability	100:1	

Valve sizes, Cv-Values, Torques

Nominal size	Cv	hole inch	rotation angle nominal (1)	max. press. nominal	max. press. nominal ANSI	req. torque [lbf ft]		standard mounting kit DIN/ISO
						on/off-operation	control operation	
1"-50%	14.5	0.59	65°	580 psi	ANSI 300	11	18	F05/SW14
1"	24.4	0.75	90°	580 psi	ANSI 300	11	18	F05/SW14
1 1/2"-50%	39.4	0.98	60°	580 psi	ANSI 300	22	37	F05/SW14
1 1/2"	74.2	1.26	90°	580 psi	ANSI 300	22	37	F05/SW14
2"	109	1.57	90°	580 psi	ANSI 300	22	37	F05/SW14
3"	295.8	2.52	90°	365 psi	ANSI 150	44	74	F07/SW17
4"	452.4	3.15	90°	365 psi	ANSI 150	66	111	F07/SW17
6"	939.6	4.72	90°	235 psi	ANSI 150	111	184	F10/SW22
8"	1583.4	6.1	90°	235 psi	ANSI 150	155	258	F12/SW27
10"	2575.2	7.68	90°	235 psi	ANSI 150	266	443	F12/SW27
12"	4454.4	9.84	90°	235 psi	ANSI 150	664	1106	F14/SW36

Valve seat combinations

Seat ring	Ball sector	Leakage	min. temp [°C]*
PTFE	stainless steel polished or hard chrome plated or lapped	5×10^{-7} from max. Kvs	-40 up to +338°F
PEEK	stainless steel polished or hard chrome plated or lapped	5×10^{-7} from max. Kvs	-40 up to +482°F
Stellit	stainless steel, hard chrome plated and lapped	Class IV-S1 acc. EN 1349 (IEC 534-4) 5×10^{-6} from max. Kvs	-40 up to +482°F
PTFE	stainless steel, hard chrome plated and lapped	Class VI acc. EN 1349 (IEC 534-4)	-40 up to +338°F
Stellit	stainless steel, hard chrome plated and lapped, seat holding ring hard chrome plated	5×10^{-7} from max. Kvs	-40 up to +482°F

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

Shaft seals (o-ring)

	min. temp [°F]	max. temp [°F]	comment
Viton (Standard)	5	392	
EPDM	-22	284	suitable for steam
NBR (P700)	-40	212	
FFKM (Perlast/Kalrez)	5	482	suitable for steam

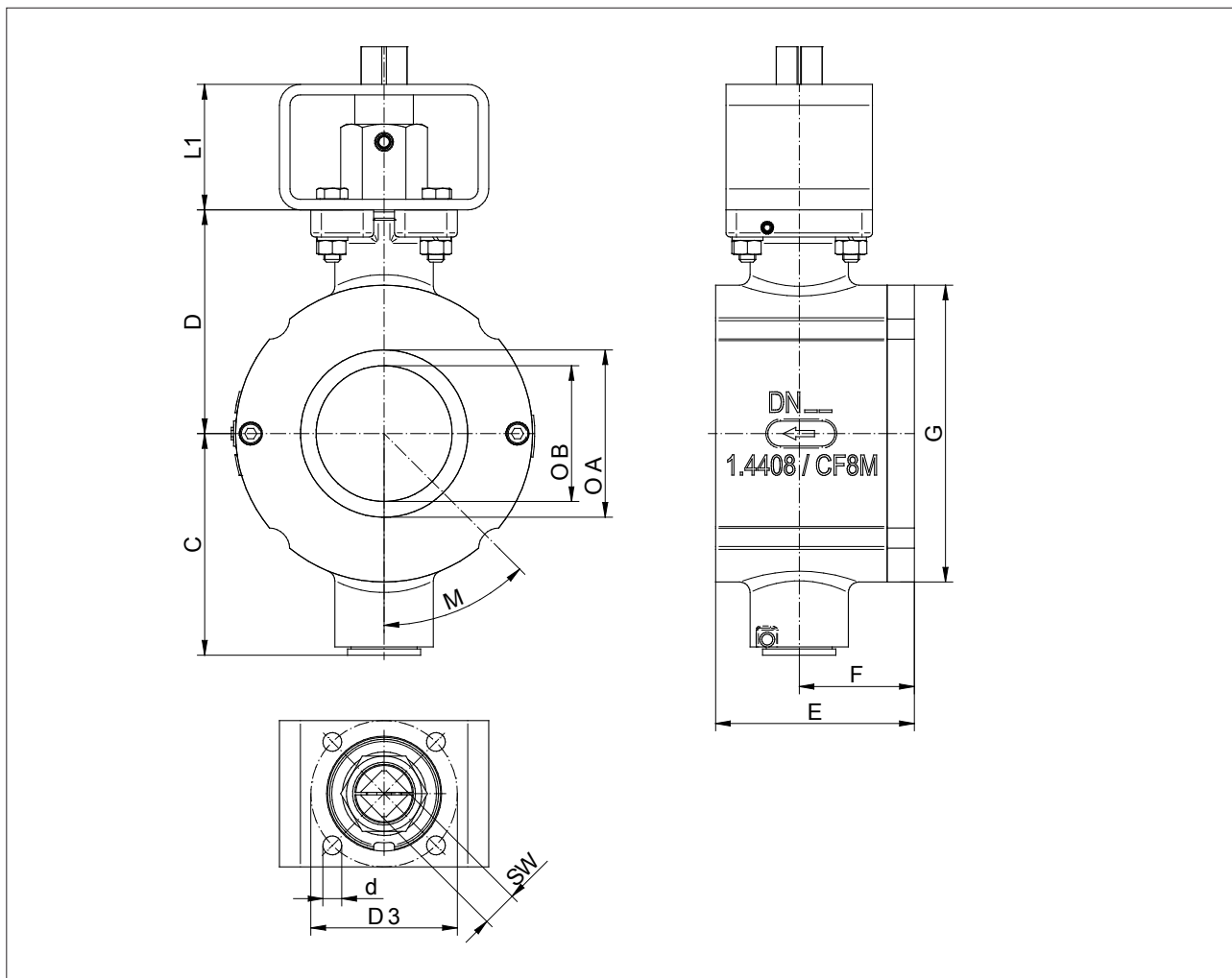
special material on request

Working pressure max.

Nominal size	maximum differential pressure (delta p)									
	seat ring PTFE			seat ring PEEK				seat ring Stellit		
	up to 176°F	248°F	338°F	up to 176°F	248°F	338°F	428°F	up to 176°F	338°F	428°F
	psi	psi	psi	psi	psi	psi	psi	psi	psi	psi
1" - 2"	365	230	85	580	580	365	230	580	580	365
3" - 4"	230	175	75	365	365	230	145	365	365	230
6" - 12"	230	175	60	230	230	175	115	230	230	175

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Dimensions without actuator (with mountig kit ISO 5211)



Nominal size	A	B	C	D	E	F	G	L1	d	D3	SW	DIN/ISO 5211
1"	1	0.8	2.85	2.9	1.95	1	2.85	2.35	0.25	1.95	0.55	F 05
1 1/2"	1.6	1.25	3.1	3.15	2.3	1.2	3.7	2.35	0.25	1.95	0.55	F 05
2"	2.1	1.55	3.25	3.25	2.8	1.5	4.4	2.35	0.25	1.95	0.55	F 05
3"	3.15	2.55	4.15	4.2	3.75	2.15	5.6	2.35	0.35	2.75	0.65	F 07
4"	3.95	3.15	4.6	4.65	4.4	2.55	6.85	2.35	0.35	2.75	0.65	F 07
6"	5.9	4.7	6.1	6.15	6.7	3.7	8.65	3.15	0.45	4	0.85	F 10
8"	7.85	6.1	7.25	7.3	8.25	4.7	11	3.15	0.55	4.9	1.05	F 12
10"	9.85	7.7	9	9	10.65	5.65	13.3	3.15	0.55	4.9	1.05	F 12

Dimensions of the valves incl. actuators on request.

Dimension in inch