

REGULATION DAMPER (SEALING PLASTIC/PLASTIC) – PP-H – DN150 to DN1800
ISOLATION DAMPER (RELATIVE SEALING) – PP-H – DN400 to DN1800



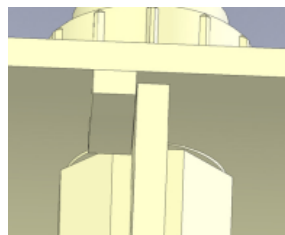
DN200 – PP-H



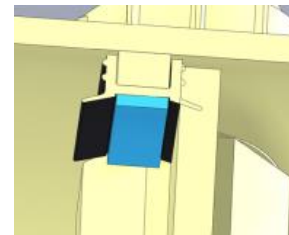
DN600 – PP-H

MAIN FEATURES

- PTFE spindle seal.
- Sealing according to NF EN 1751.
- Manual damper suitable for actuation (ISO).



REGULATION damper
Sealing Plastic/Plastic



ISOLATION damper
Relative sealing (adapted seal)

The SAFI dampers can only be used on low pressure gases and cannot be used with liquids.

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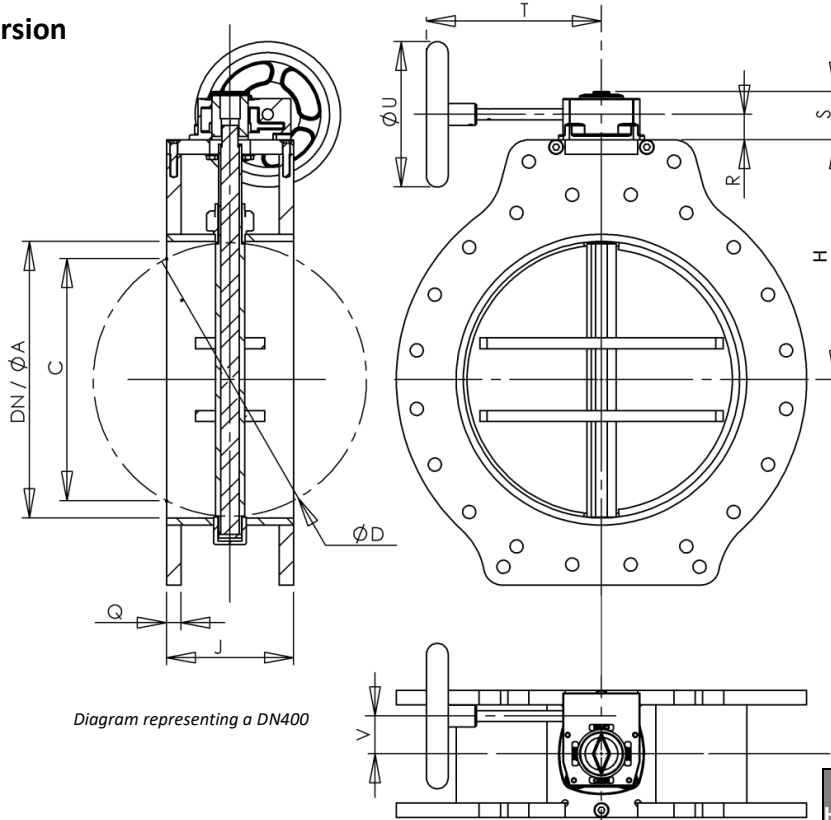
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DIMENSIONS

Manual version



DN	ØA	ØC	ØD	H	J	Q	R	S	T	U	V	WEIGHT of Handwheel Gearbox (Kg)	WEIGHT of Damper (Kg)
150	150	0	145	155	145	15	26,5	56,5	152	125	38,5	2,5	2,31
200	188	110	182	190	145	20							3,71
250	234	173	229	220	150	20							4,93
300	295	248	290	260	150	20							6,32
350	333	292	328	290	150	20							7,9
400	380	326	370	330	175	20							10,05
450	430	382	420	360	175	20							14,2
500	480	362	470	370	300	25							19,9
600	580	485	570	440	300	25							23,7
700	686	599	670	500	300	25							30,8
800	776	709	770	550	300	25							37,3
900	876	817	870	600	300	25							42,4
1000	976	918	966	670	300	25	50,8						
1100	1076	1023	1066	720	300	30	35	67	254	250	52	4,5	69,3
1200	1176	1127	1166	780	300	30							77,8
1300	1276	1230	1266	840	300	30							84,4
1400	1370	1326	1360	850	300	30							101,5
1500	1470	1404	1460	900	400	30							129,7
1600	1570	1508	1560	950	400	30							131,6
1700	1670	1611	1660	1000	400	30							145,5
1800	1770	1714	1760	1050	400	30							165,5

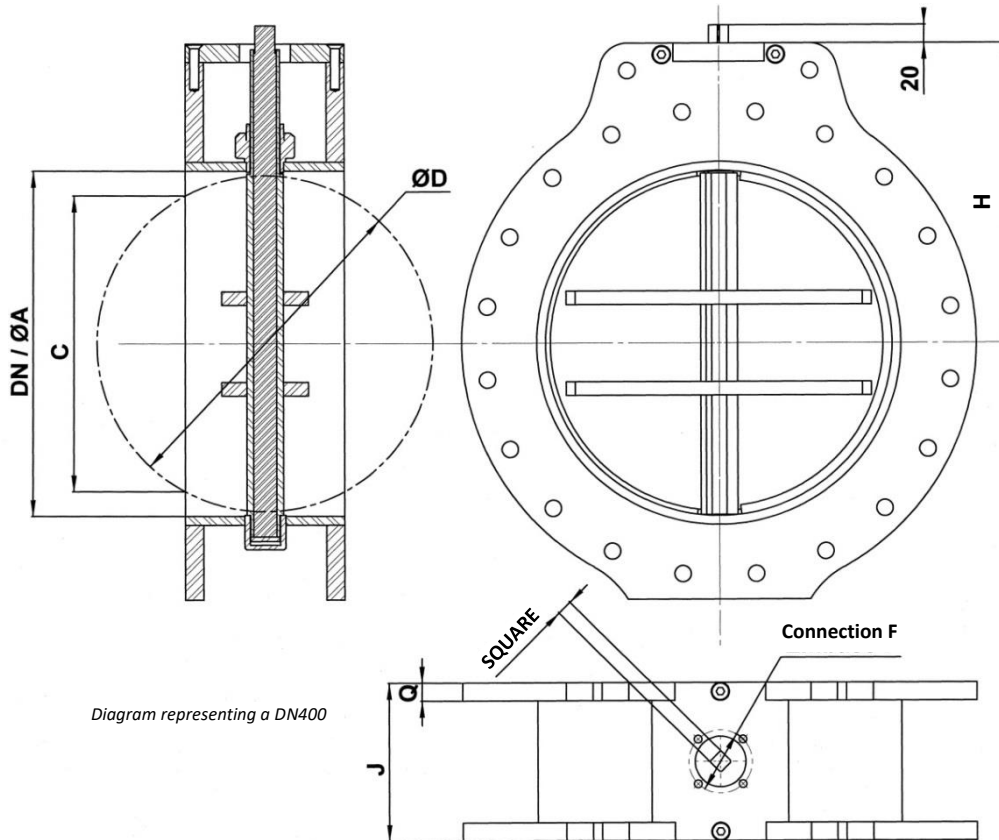
DIN = Drilling in accordance with EN 1092-1 PN10/PN16

ANSI = Drilling in accordance with EN1759-1/ASME B16.5 Class 150

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Suitable for actuation version



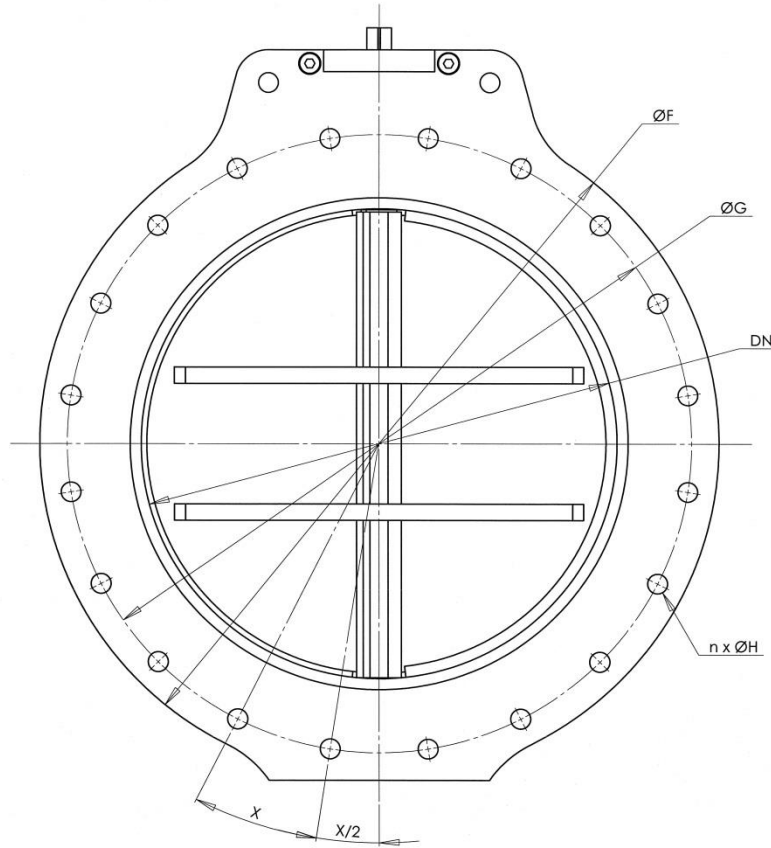
DN	ØA	H	C	ØD	J	Q	SQUARE	CONNECTION F
150	150	155	150	145	145	15	14	F05/F07
200	188	190	110	182	145	20	14	F05/F07
250	234	220	173	229	150	20	14	F05/F07
300	295	260	248	290	150	20	14	F05/F07
350	333	290	292	328	150	20	14	F05/F07
400	380	330	326	370	175	20	17	F07
450	430	360	382	420	175	20	17	F07
500	480	370	362	470	300	25	17	F07/F10
600	580	440	485	570	300	25	17	F07/F10
700	686	500	599	670	300	25	17	F07/F10
800	776	550	709	770	300	25	17	F07/F10
900	876	600	817	870	300	25	17	F07/F10
1000	976	670	918	966	300	25	17	F07/F10
1100	1076	720	1023	1066	300	30	22	F10
1200	1176	780	1127	1166	300	30	22	F10
1300	1276	840	1230	1266	300	30	22	F10
1400	1370	850	1326	1360	300	30	22	F10
1500	1470	900	1460	1460	400	30	22	F10
1600	1570	950	1560	1560	400	30	22	F10
1700	1670	1000	1611	1660	400	30	22	F10
1800	1770	1050	1714	1760	400	30	22	F10

For the stocking, handling and installation conditions, see DOC-DAMP-0001

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DIMENSIONS OF FLANGE DRILLS



DN		ØF	ØG		ØH		n	X (°)
			DIN	ANSI	DIN	ANSI		
150	Drilling in accordance with DIN / ANSI	285	240	241	22	22	8	45
200		340	295	298	22	22	8	45
250		395	350	362	22	25	12	30
300		445	400	432	22	24	12	30
350		505	460	476	22	28	16	22,5
400	SAFI drilling	565	515		18		20	18
450		615	565		18		20	18
500		670	620		18		24	15
600		780	725		18		24	15
700		895	840		18		32	11,25
800		1015	950		18		32	11,25
900		1115	1050		18		36	10
1000		1230	1160		18		40	9
1100		1340	1265		18		40	9
1200		1455	1380		18		48	7,5
1300		1530	1440		18		48	7,5
1400		1600	1500		18		48	7,5
1500		1660	1600		18		48	7,5
1600	1760	1700		18		48	7,5	
1700	1860	1800		18		48	7,5	
1800	1960	1900		18		48	7,5	

DIN = Drilling in accordance with EN 1092-1 PN10/PN16

ANSI = Drilling in accordance with EN1759-1/ASME B16.5 Class 150

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PARTS LIST

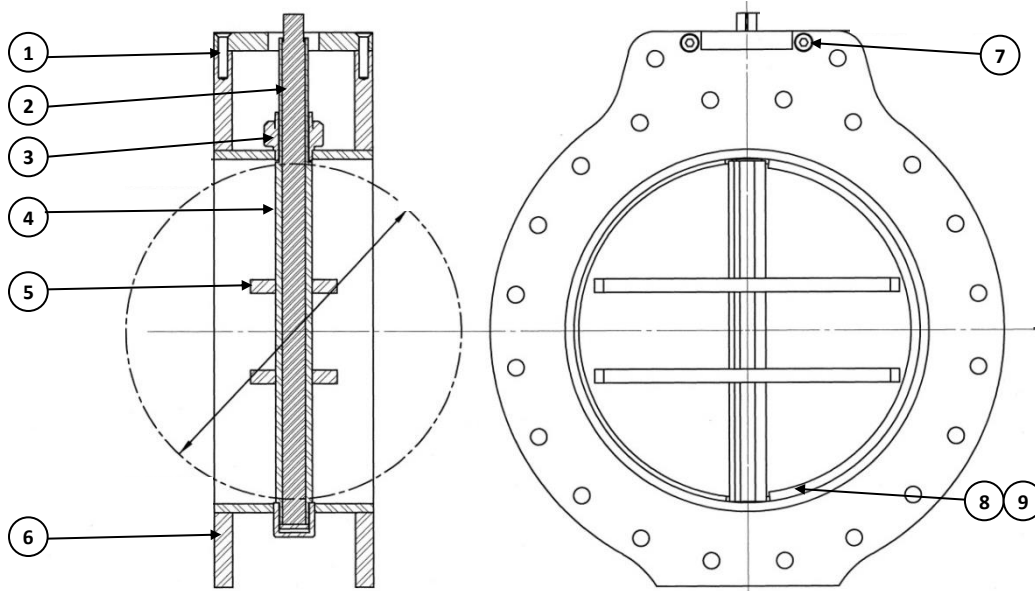


Diagram representing a DN400

Item	QTY	DESCRIPTION	MATERIAL
1	4	SCREW	SS 316
2	1	SPINDLE	SS 316
3	3	NUT + PTFE o-ring	PP-H
4	1	BUTTERFLY	PP-H
5	2 to 4	REINFORCEMENT (according to DN)	PP-H
6	1	BODY	PP-H
7	4	SCREW	SS 316
8	2	MECHANICAL STOP	PP-H
9	2	SEAL (according to version)	EPDM / FPM

PRESSURE / TEMPERATURE / FLOW RATE

	PP-H	
Working Temperature	-10°C to +60°C	
Max. working pressure	Up to DN1700	+/- 5000 Pa. Above such, contact us
	DN1800 and higher	+/- 3000 Pa. Above such, contact us
Maximum speed of the fluid	8 m/s. Above such, contact us	

SEALING

The sealing of the damper complies with the standard NF EN 1751 and detailed in the table below:

	Damper with plastic/plastic tightness (5150/5151)	Damper with relative airtightness (5154/5155)
Envelope sealing	C Class	C Classe
Shutter sealing	0 Class	2 Classe

Sealings are indicated in pressure and depression.

This type of sealing applies regardless of the DN of the register (DN150 to 1800)

Some diameters of relative sealing dampers have under certain conditions a Class 3 shutter seal. Please consult us.

CHEMICAL RESISTANCE

The chemical resistance of the valve is subject to the type of fluid, the temperature, the pressure, as well as the materials and seals of the valve.

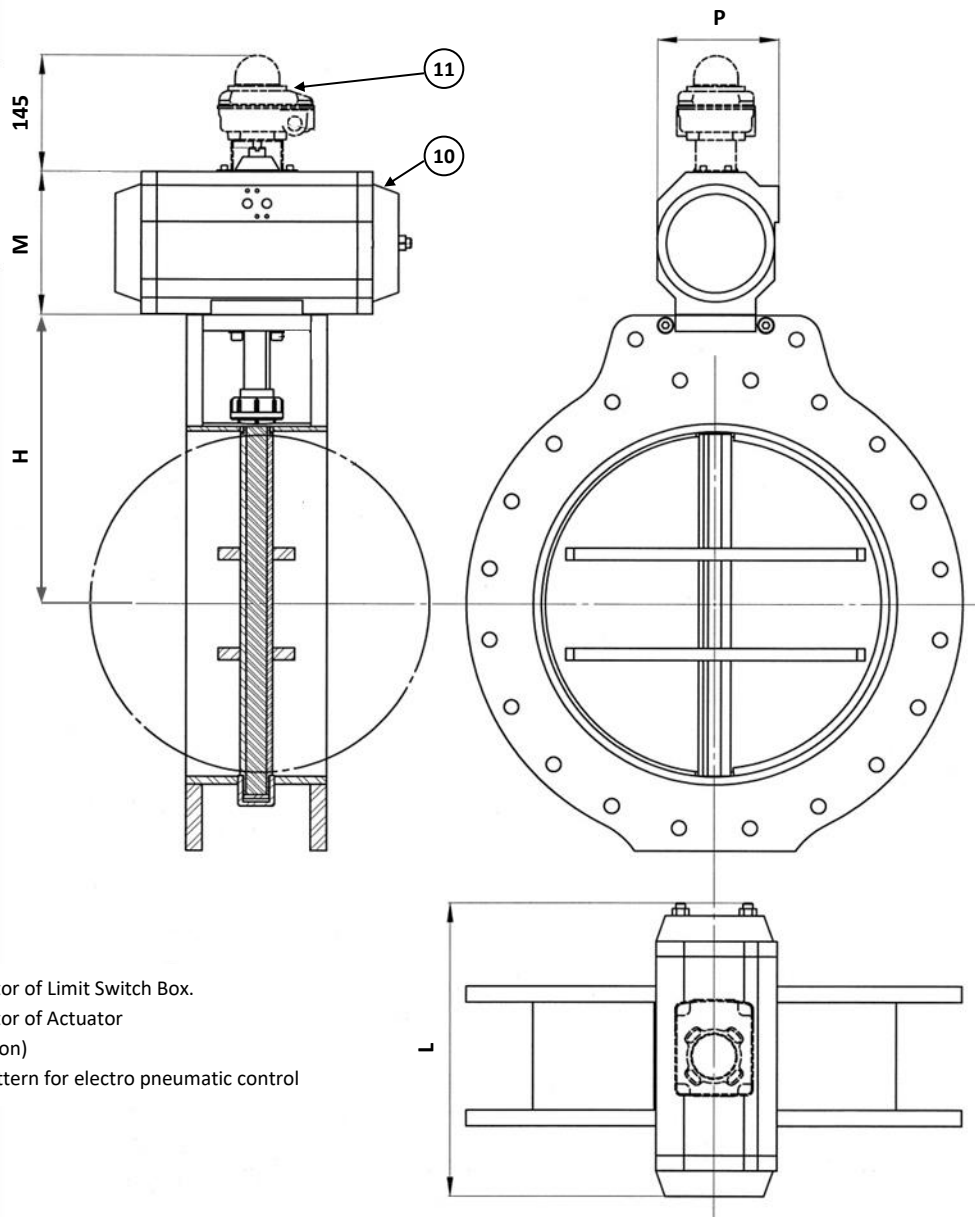
Please contact us to have a personalized analysis of the resistance of one of our products to a given fluid

You can also consult, for information only, the table given in ISO 10358. However, this table cannot be considered as a recommendation by SAFI who could not be held liable for the use of this document.

OPERATING TORQUE

The operating torque depends on the size of the damper, but also the pressures and flow rate of the fluid conveyed. For more information, contact us.

OPTION: PNEUMATIC ACTUATION



- (1) Visual position indicator of Limit Switch Box.
- (2) Visual position indicator of Actuator
- (3) Limit Switch Box (option)
- (4) NAMUR mounting pattern for electro pneumatic control

Item	Qty	DESCRIPTION	MATERIAL
10	1	Actuator Double Acting or Fail Safe	Polyamide or Aluminium or Stainless Steel
11	1	Limit Switch Box (option)	Aluminium

Pneumatic Actuators recommendation according to DN and Material of the Valves

POLYAMIDE Actuator

DN	ACTUATOR	ISO 5211 FIXINGS (CONNECTION/DSS*)		H	L	M	P	WEIGHT of Actuator in Kg	PRODUCT CODE	MATERIAL
DN150 to DN350	Double Acting (DA)	F05	EF14	See dimensions for each DN on page 3	160	90	86	1,10	2007-73B	Actuator in Polyamide
	Fail Safe	F07	EF17		175	111,5	101	1,97	2007-73N (NC) 2007-75N (NO)	
DN400 to 450	Double Acting (DA)	F07	EF17		175	111,5	101	1,97	2007-73C	
	Fail Safe	F07	EF17		175	111,5	101	1,97	2007-73N (NC) 2007-75N (NO)	

ALUMINIUM Actuator

DN	ACTUATOR	ISO 5211 FIXINGS (CONNECTION/DSS*)		H	L	M	P	WEIGHT of Actuator in Kg	PRODUCT CODE	MATERIAL
DN150 to DN350	Double Acting (DA)	F05-F07	EF14	See dimensions for each DN on page 3	175	81	81	1,50	2007-83C	Actuator in Aluminium
	Fail Safe	F05-F07	EF17		186	98	96	2,53	2007-84D (NC) 2007-85D (NO)	
DN400 to DN450	Double Acting (DA)	F05-F07	EF14		175	81	81	1,50	2007-83C	
	Fail Safe	F05-F07	EF17		186	98	96	2,53	2007-84D (NC) 2007-85D (NO)	
DN500 to DN600	Double Acting (DA)	F05-F07	EF14		175	81	81	1,50	2007-83C	
	Fail Safe	F05-F07	EF17		248	98	96	3,77	2007-84E (NC) 2007-85E (NO)	
DN700 to DN900	Double Acting (DA)	F05-F07	EF17		248	98	96	3,25	2007-83E	
	Fail Safe	F05-F07	EF17		241	117	114	4,88	2007-84F (NC) 2007-85F (NO)	
DN1000	Double Acting (DA)	F05-F07	EF17		241	117	114	4,15	2007-83F	
	Fail Safe	F07-F10	EF22		305	154	131	9,38	2007-84H (NC) 2007-85H (NO)	
DN1100 to DN1800	Double Acting (DA)	F07-F10	EF22		305	154	131	7,70	2007-83H	
	Fail Safe	F07-F10	EF22		367	168,5	145	13,21	2007-84I (NC) 2007-85I (NO)	

*DSS = Double Square Socket

NC= Normally Closed – NO = Normally Open

(Recommended actuator for an air supply of 5.6bars)

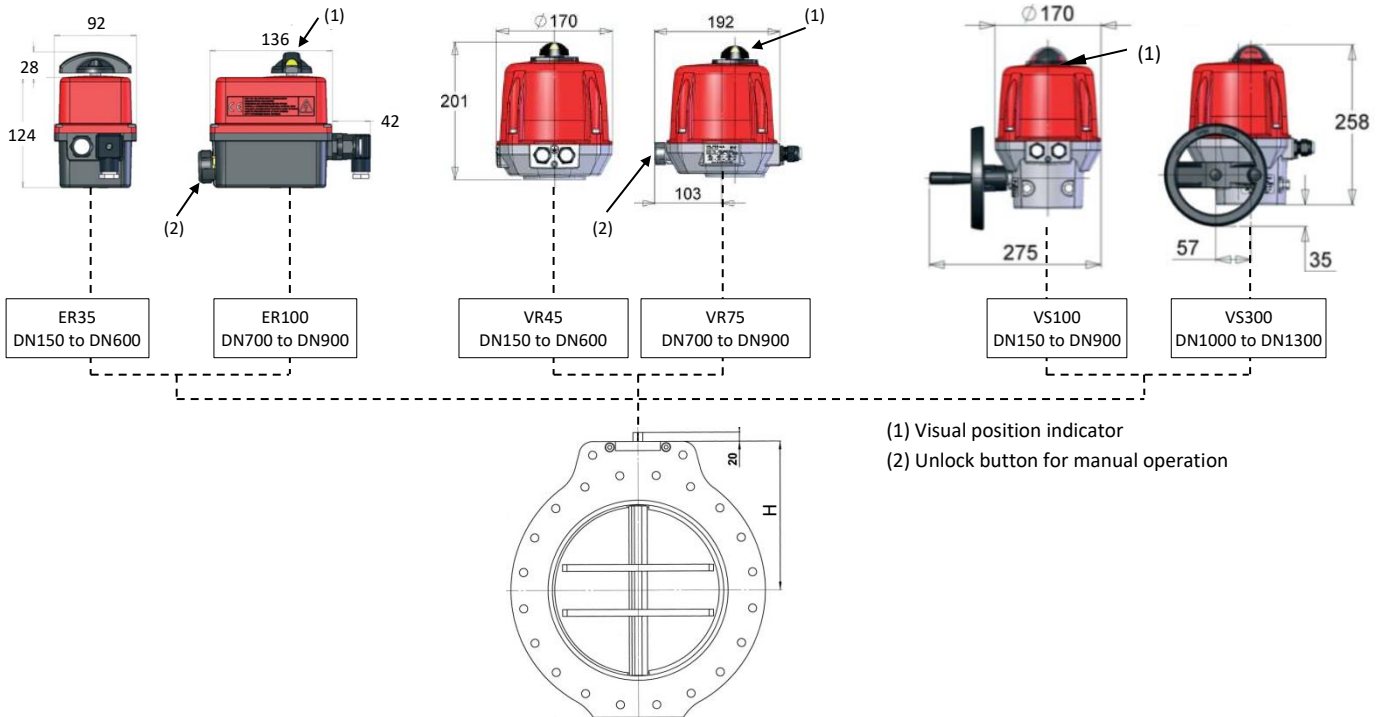
Find all the information concerning these actuators by consulting our TDS-ACTPN-0001 product sheet.

Contact us, for other type of Actuators or Limit Switch Boxes

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OPTION: ELECTRIC ACTUATION



DN	MODEL	ISO 5211 FIXINGS (CONNECTION/DSS*)	H	WEIGHT KG	PRODUCT CODE	MATERIAL	ROTATION 90°
DN 150 to DN 600	ER35	15-30VAC 12-48VDC	F05-F07 EF22	1 to 2,1	2907-41N	PA6	7s
		90-240VAC 90-350VDC	F05-F07 EF22	1 to 2,1	2907-41R	PA6	7s
	VR45	15-30VAC 12-48VDC	F05-F07 EF17	3,1 to 4,4	2907-42D	Alu + PA6	15s
		90-240VAC 90-350VDC	F05-F07 EF17	3,1 to 4,4	2907-42B	Alu + PA6	15s
		400V Triphase	F05-F07 EF17	3,1 to 4,4	2907-42C	Alu + PA6	10s
DN 150 to DN 900	VS100	15-30VAC 12-48VDC	F07-F10 EF22	5,1 to 6,4	2907-45M	Alu + PA6	15s
		90-240VAC 90-350VDC	F07-F10 EF22	5,1 to 6,4	2907-45B	Alu + PA6	15s
		400V Triphase	F07-F10 EF22	5,1 to 6,4	2907-45I	Alu + PA6	10s
DN 700 To DN 900	ER100	15-30VAC 12-48VDC	F05-F07 EF22	1 to 2,1	2907-49D	PA6	22s
		90-240VAC 90-350VDC	F05-F07 EF22	1 to 2,1	2907-49B	PA6	23s
	VR75	15-30VAC 12-48VDC	F05-F07 EF17	3,1 to 4,4	2907-44A	Alu + PA6	20s
		90-240VAC 90-350VDC	F05-F07 EF17	3,1 to 4,4	2907-44B	Alu + PA6	20s
		400V Triphase	F05-F07 EF17	3,1 to 4,4	2907-44J	Alu + PA6	15s
DN 1000 to DN1800	VS300	15-30VAC 12-48VDC	F07-F10 EF22	1 to 1,2	2907-47C	Alu + PA6	60s
		90-240VAC 390-350VDC	F07-F10 EF22	1 to 1,2	2907-47A	Alu + PA6	60s
		400V Triphase	F07-F10 EF22	3,1 to 3,5	2907-47B	Alu + PA6	35s

See dimensions for each DN on page 3

*DSS = Double Square Socket

Find all the information concerning these actuators by consulting our TDS-ACTEL-0001 product sheet

Multiple Options Available: Contact us for more information

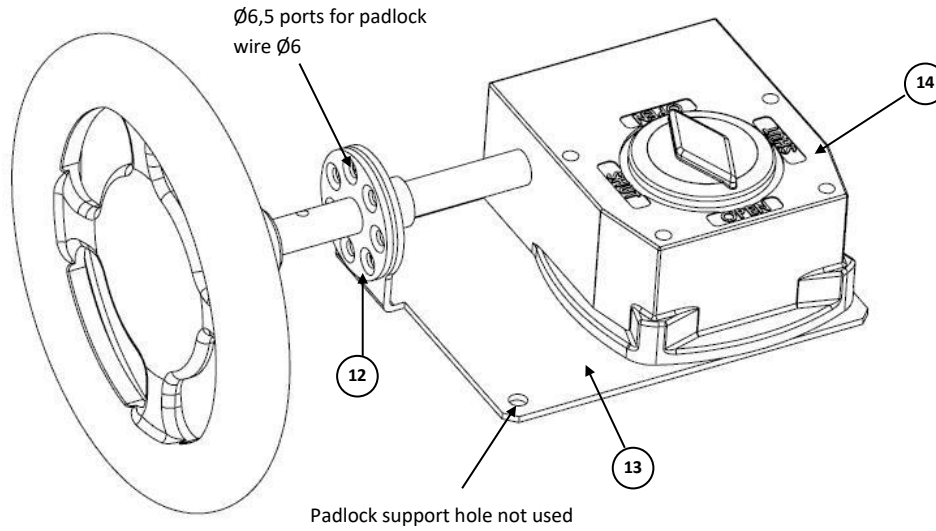
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OPTION: LOCKING SYSTEM (manual version only)



Item	Qty	DESCRIPTION	MATERIAL	PRODUCT CODE
12	2	Padlock shaft	SS 304	A01EQDII0030
13	2	Padlock plate	SS 304	
14	2	Handwheel gearbox	SS 304	

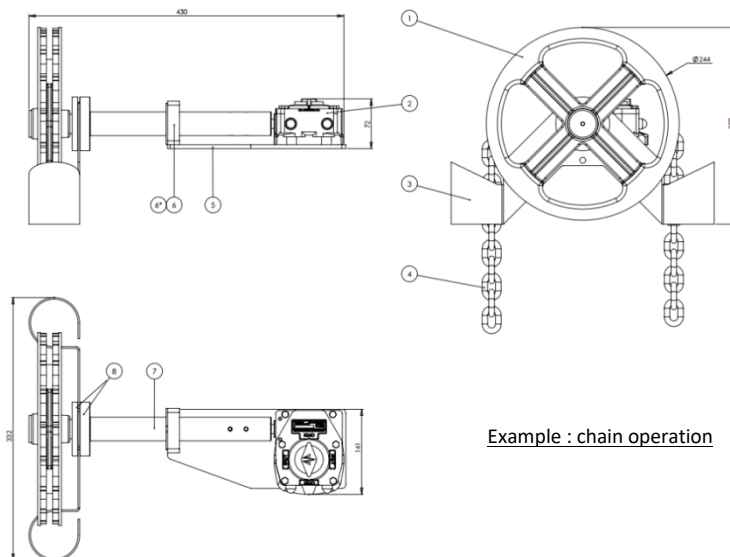
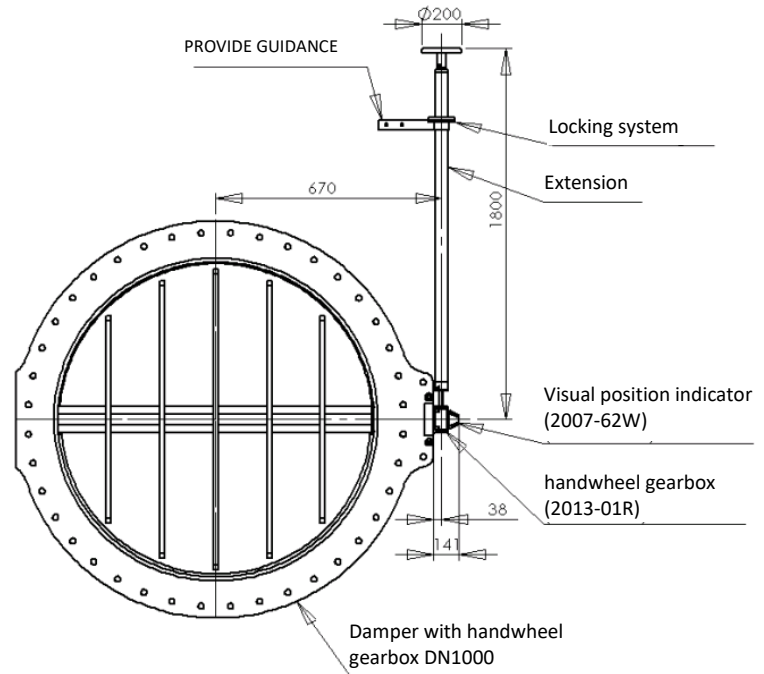
Option : SS 316 – Consult us

OTHER AVAILABLE OPTIONS

- . U.V protection
- . Chain operation
- . Steering wheel extension
- . Locking system
- . Visual indicator
- . Limit Switch Box
- . 4/20ma positioner

Contact us, for more information on the available options.

Example : steering wheel extension



Example : chain operation

CONNECTION/INSTALLATION

It is the customer's responsibility to ensure that the piping or system to which the valve is connected does not apply any mechanical stress on it. If opposite, please consult us.

For the valves equipped with an actuator, backing of the weight of the actuator is mandatory via a support system of the latter or the valve, which is the installer's responsibility.

DETERMINING A PRODUCT CODE

TYPE	SPECIFICATION	DN		Drilling of Flanges	Seals
5150 = Manual regulation damper in PP-H - plastic / plastic sealing DN150 to DN1800 5151 = Regulation damper suitable for actuation in PP-H, plastic / plastic sealing DN150 to DN1800	- = Standard damper Z = Special damper	10 = DN150 11 = DN200 12 = DN250 13 = DN300 14 = DN350 15 = DN400 16 = DN450 17 = DN500 18 = DN600 19 = DN700 20 = DN800	21 = DN900 22 = DN1000 23 = DN1100 24 = DN1200 25 = DN1300 26 = DN1400 27 = DN1500 28 = DN1600 29 = DN1700 30 = DN1800	DN 150 to DN350 : FF = Flanges with drilling in accordance with EN 1092-1 PN10/PN16 (DIN) GG = Flanges with drilling in accordance with EN1759-1/ASME B16.5 Class 150 (ANSI) >DN 350 : FF = Flanges with SAFI drilling	P = PTFE E = EPDM + PTFE V = FPM + PTFE
5154 = Manual isolation damper in PP-H - relative sealing DN400 to DN1800 5155 = Isolation damper suitable for actuation in PP-H, relative sealing DN400 to DN1800					

Example: 5150-12FFP

5150	-	12	FF	P
Manual regulation damper in PP-H Plastic / plastic sealing	Standard Damper	DN250	Flanges with drilling in accordance with EN 1092-1 PN10/PN16 (DIN)	PTFE

Example: Damper suitable for actuation with relative sealing+ electric actuator: 5155-30FFE + 2907-47C

5155-30FFE	+	2907-47C
Isolation damper suitable for actuation in PP-H, Relative sealing DN1800 Flanges with SAFI drilling EPDM+PTFE	+	Electric actuator VS300 15-30V AC 12-48V DC F07-F10 / EF22