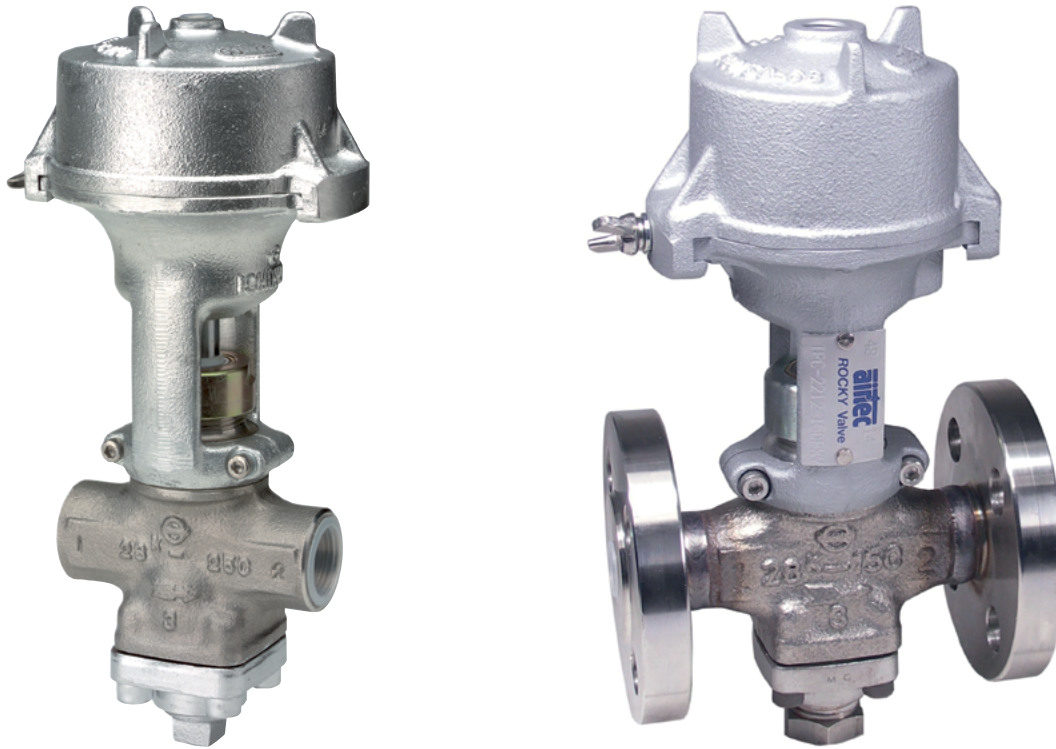


For over 30 years, AIRTEC has been the trusted supplier and service company for ROCKY™ valves. Over this time the brand has become the preferred choice in Tire manufacturing facilities worldwide for controlling Steam, Nitrogen and hot and cold water. Modern precision manufacturing methods and tight quality control along with selection of only the very best materials guarantee ROCKY™ valves to perform in the harshest conditions. The combination of sealing materials provides a bubble tight seal which is critical to the overall performance and reliability. TPC valves and accessories were primarily developed for the rationalization and automation of processes used in the tire, plastic and rubber manufacturing industries but are suitable for most applications requiring reliable on/off control of Steam, Nitrogen and Hot or Cold water. Put us to the test!



Key features

- Stainless steel body, seats, stem and flanges
- Teflon® piston ring
- Carbon Teflon® disc rings
- Teflon® and Carbon Teflon® gland packings
- 2 or 3 way function by adding or removing a plug in port 3
- Normally open or normally closed function

Technical data

Operating pressure	max. 580 psi
Back pressure	max. 362 psi
Pilot pressure	36 - 51 psi
Pressure class	300
Temperature range	- 22°F to + 446°F
Connections	Thread NPT, BSPT, PT Flange ANSI, DIN, JIS
Media	Steam, nitrogen and other inert gases, hot or cold water, air

Order Code

TPC-2***-****

Series

TPC-2 Standard

Version

2 2/2-way
3 3/2-way

Function

1 Normally closed (NC)
2 Normally open (NO)

Connection

1 Thread
2 Flange / thread
3 Flange

Nominal size / thread

08 8 mm 1/4"
10 10 mm 3/8"
15 15 mm 1/2"
20 20 mm 3/4"
25 25 mm 1"
32 32 mm 1 1/4"
40 40 mm 1 1/2"
50* 50 mm -

Material gland packing

Teflon® and Carbon Teflon®
H Carbon Teflon® (up to + 482°F)

Material

X Lower seat stainless steel
Y Flange stainless steel

Type of thread lower seat

N NPT thread
B* BSPT thread
P* PT thread

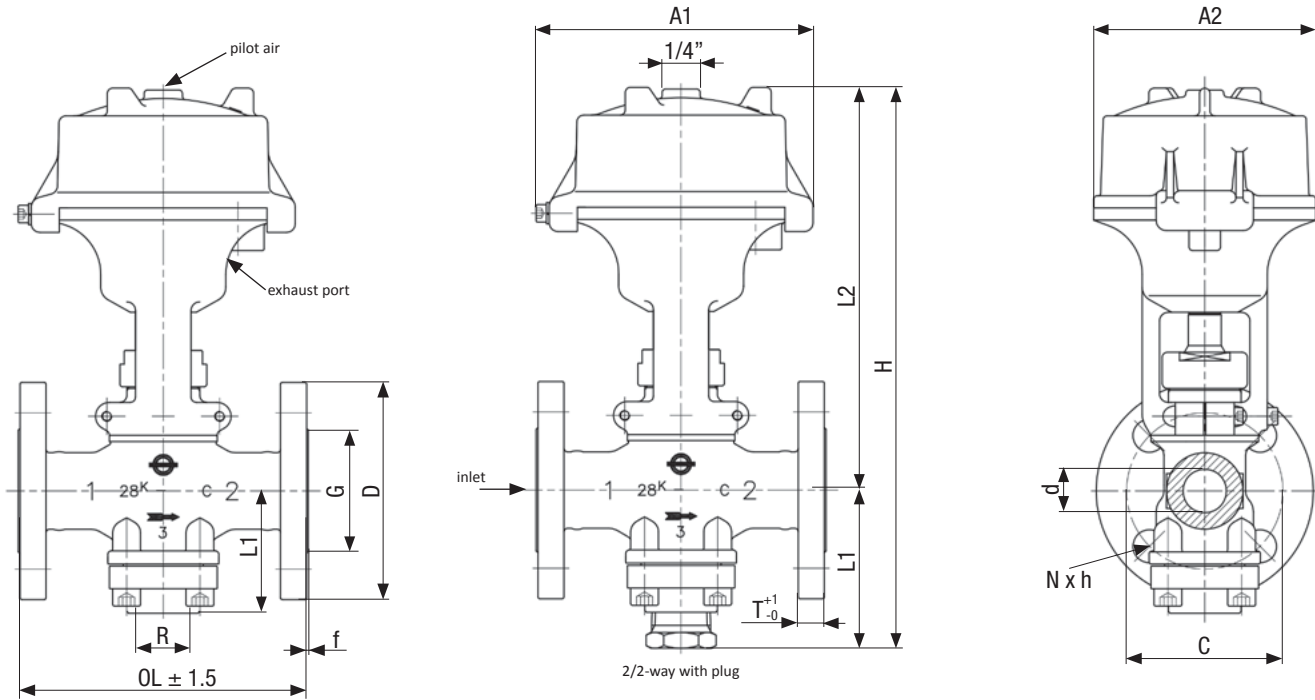
Type of thread / flange

N NPT thread
B* BSPT thread
P* PT thread
A ANSI flange
D* DIN flange
J* JIS flange

* Available on Request. Not a stock item.

1

Dimensions (mm)



TPC valve, with flange, 2/2-way, NC

Model No.*	DN	R	d	OL (DIN)	OL (ANSI)	OL (JIS)	L1	L2	H	A1	A2	Stroke	Weight (lbs)
TPC-2212-15ANXY	15	1/2"	13	130	140	146	65.1	163.5	228.6	120	82	9.3	9
TPC-2212-20ANXY	20	3/4"	19	150	150	146	84.8	193	277.8	139	100	12	13.2
TPC-2212-25ANXY	25	1"	25	160	170	167	90.9	232	322.9	169	128	18	21.4
TPC-2212-32ANXY	32	1 1/4"	32	180	190	190	112.6	250	362.6	185	142	20	30.2
TPC-2212-40ANXY	40	1 1/2"	40	200	200	190	115.6	302	417.6	211	170	23	41.4

TPC valve, with flange, 3/2-way, NC

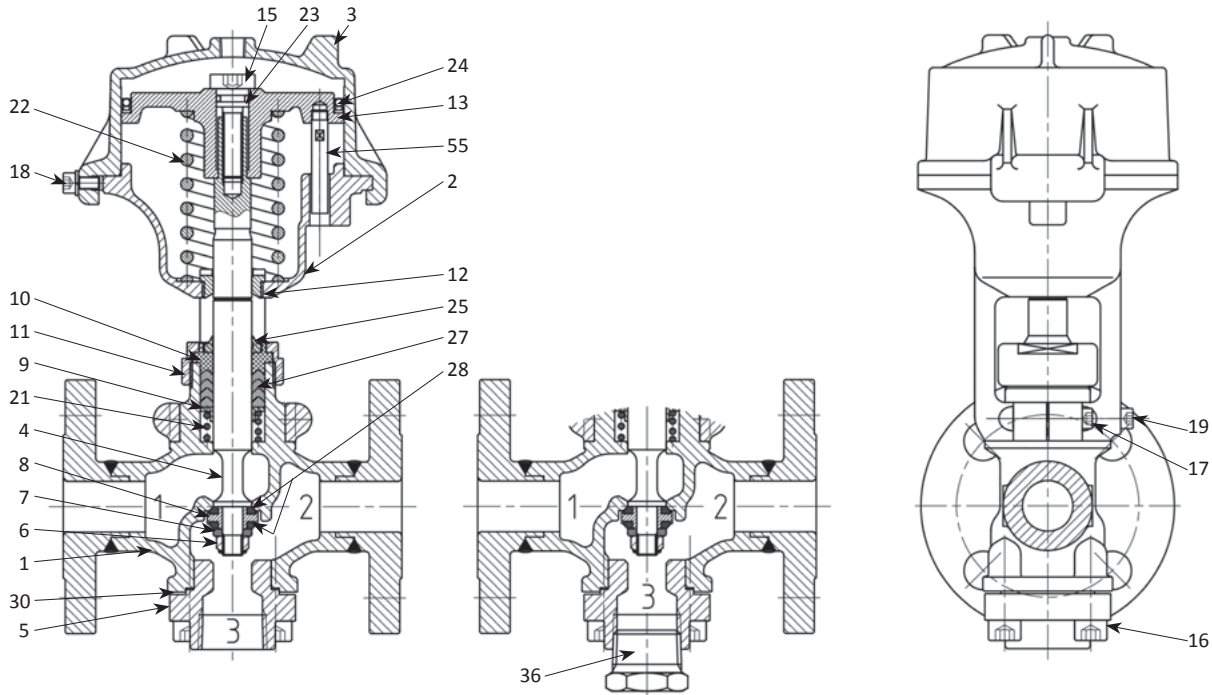
Model No.	DN	R	d	OL (DIN)	OL (ANSI)	OL (JIS)	L1	L2	H	A1	A2	Stroke	Weight (lbs)
TPC-2312-15ANXY	15	1/2"	13	130	140	146	48.3	163.5	211.8	120	82	9.3	9
TPC-2312-20ANXY	20	3/4"	19	150	150	146	66.3	193	259.3	139	100	12	13.2
TPC-2312-25ANXY	25	1"	25	160	170	167	71.3	232	303.3	169	128	18	21.4
TPC-2312-32ANXY	32	1 1/4"	32	180	190	190	91.3	250	341.3	185	142	20	30.2
TPC-2312-40ANXY	40	1 1/2"	40	200	200	190	91.3	302	393.3	211	170	23	41.4

* Also available as version D with DIN flange or J with JIS flange and as version B with BSPT thread or P with PT thread. (on request, not a stock item)

Dimensions for ANSI flange

DN	D	C	G	T	f	N	h
15	95	66.5	35	14.5	1.6	4	15
20	117	82.5	43	16.0	1.6	4	19
25	124	89.0	51	18.0	1.6	4	19
32	133	98.5	63.5	19.1	1.6	4	19
40	156	114.5	73	21.0	1.6	4	22

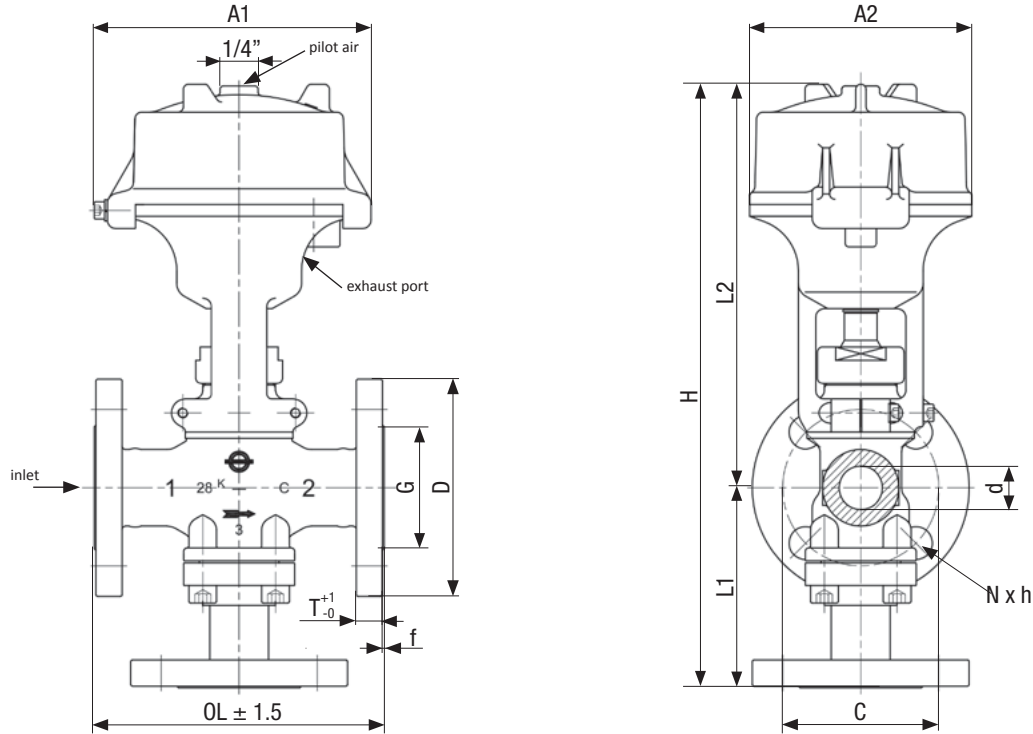
Spare parts



Nr. No.	Name	Valve	TPC-2212-15#*XY	TPC-2212-20#*XY	TPC-2212-25#*XY	TPC-2212-32#*XY	TPC-2212-40#*XY
			TPC-2312-15#*XY	TPC-2312-20#*XY	TPC-2312-25#*XY	TPC-2312-32#*XY	TPC-2312-40#*XY
1	Body		C-21215 - 01 #Y	C-21220 - 01 #Y	C-21225 - 01 #Y	C-21232 - 01 #Y	C-21240 - 01 #Y
2	Yoke		C-21115 - 02	C-21120 - 02	C-21125 - 02	C-21132 - 02	C-21140 - 02
3	Cylinder		C-21115 - 03 *	C-21120 - 03 *	C-21125 - 03 *	C-21132 - 03 *	C-21140 - 03 *
4	Stem		C-21115 - 04	C-21120 - 04	C-21125 - 04	C-21132 - 04	C-21140 - 04
5	Lower seat		C-21115 - 05 *X	C-21120 - 05 *X	C-21125 - 05 *X	C-21132 - 05 *X	C-21140 - 05 *X
6	U-nut		C-21115 - 06	C-21120 - 06	C-21125 - 06	C-21132 - 06	C-21140 - 06
7	Guide washer		C-21115 - 07	C-21120 - 07	C-21125 - 07	C-21132 - 07	C-21140 - 07
8	Disc adapter		C-21115 - 08	C-21120 - 08	C-21125 - 08	C-21132 - 08	C-21140 - 08
9	Ring washer		C-21115 - 09	C-21120 - 09	C-21125 - 09	C-21132 - 09	C-21140 - 09
10	Gland		C-21115 - 10	C-21120 - 10	C-21125 - 10	C-21132 - 10	C-21140 - 10
11	Gland nut		C-21115 - 11	C-21120 - 11	C-21125 - 11	C-21132 - 11	C-21140 - 11
12	Guide bushing		C-21115 - 12	C-21120 - 12	C-21125 - 12	C-21132 - 12	C-21140 - 12
13	Piston		C-21115 - 13	C-21120 - 13	C-21125 - 13	C-21132 - 13	C-21140 - 13
15	Tension bolt		C-21115 - 15	C-21120 - 15	C-21125 - 15	C-21132 - 15	C-21140 - 15
16	Socket cap screw		C-21115 - 16	C-21120 - 16	C-21125 - 16	C-21132 - 16	C-21140 - 16
17	Socket cap screw		C-21115 - 17	C-21120 - 17	C-21125 - 17	C-21132 - 17	C-21140 - 17
18	Wing bolt		C-21115 - 18	C-21120 - 18	C-21125 - 18	C-21132 - 18	C-21140 - 18
19	Socket cap screw		C-21115 - 19	C-21120 - 19	C-21125 - 19	C-21132 - 19	C-21140 - 19
21	Packing spring		C-21115 - 21	C-21120 - 21	C-21125 - 21	C-21132 - 21	C-21140 - 21
22	Piston Spring		C-21115 - 22	C-21120 - 22	C-21125 - 22	C-21132 - 22	C-21140 - 22
23	O-ring		C-21115 - 23	C-21120 - 23	C-21125 - 23	C-21132 - 23	C-21140 - 23
24	Piston ring		C-21115 - 24	C-21120 - 24	C-21125 - 24	C-21132 - 24	C-21140 - 24
25	Dust seal		C-21115 - 25	C-21120 - 25	C-21125 - 25	C-21132 - 25	C-21140 - 25
27	Gland packing		C-21115 - 27	C-21120 - 27	C-21125 - 27	C-21132 - 27	C-21140 - 27
28	Disc ring (2x)		C-21115 - 28	C-21120 - 28	C-21125 - 28	C-21132 - 28	C-21140 - 28
30	Lower seat gasket		C-21115 - 30	C-21120 - 30	C-21125 - 30	C-21132 - 30	C-21140 - 30
36	Plug		C-21115 - 36 *X	C-21120 - 36 *X	C-21125 - 36 *X	C-21132 - 36 *X	C-21140 - 36 *X
55	Pin gauge		C-21115 - 55	C-21120 - 55	C-21125 - 55	C-21132 - 55	C-21140 - 55

please complete: A = ANSI flange, D = DIN flange, J = JIS flange / * please complete: N = NPT thread, B = BSPT thread, P = PT thread

Dimensions (mm)



TPC valve, with flange, 3/2-way, NC

Model No.*	DN	R	d	OL (ANSI)	OL (JIS)	OL (DIN)	L1 (ANSI)	L1 (JIS)	L1 (DIN)	L2
TPC-2313-15ANXY	15	1/2"	13	140	146	130	105	85	140	163.5
TPC-2313-20ANXY	20	3/4"	19	150	146	150	110	100	140	193
TPC-2313-25ANXY	25	1"	25	170	167	160	135	115	140	232
TPC-2313-32ANXY	32	1 1/4"	32	190	190	180	145	130	175	250
TPC-2313-40ANXY	40	1 1/2"	40	200	190	200	150	145	175	302

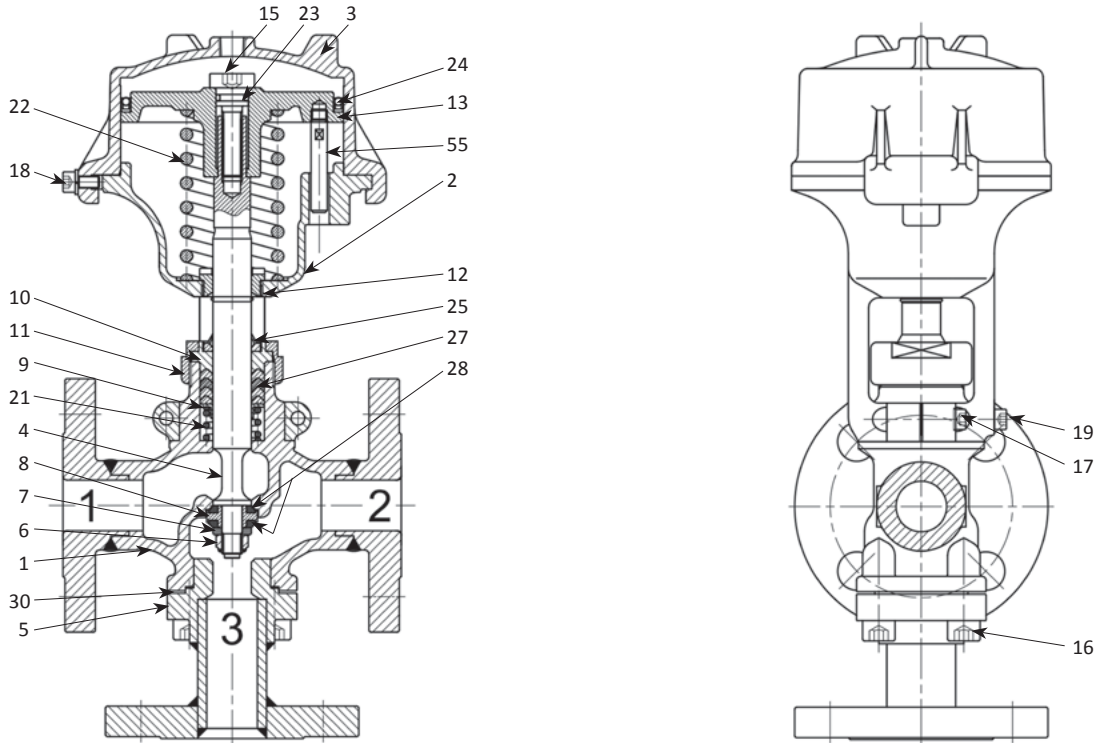
Model No.*	H (ANSI)	H (JIS)	H (DIN)	A1	A2	Stroke	Weight (lbs)
TPC-2313-15ANXY	268.5	248.5	303.5	120	82	9.3	9.9
TPC-2313-20ANXY	303	293	333	139	100	12	14.3
TPC-2313-25ANXY	367	347	372	169	128	18	20.3
TPC-2313-32ANXY	395	380	425	185	142	20	29.8
TPC-2313-40ANXY	452	447	477	211	170	23	47.4

* Also available as version D with DIN flange or J with JIS flange and as version B with BSPT thread or P with PT thread. (on request, not a stock item)

Dimensions for ANSI flange

DN	D	C	G	T	f	N	h
15	95	66.5	35	14.5	1.6	4	15
20	117	82.5	43	16.0	1.6	4	19
25	124	89.0	51	18.0	1.6	4	19
32	133	98.5	63.5	19.1	1.6	4	19
40	156	114.5	73	21.0	1.6	4	22

Spare parts



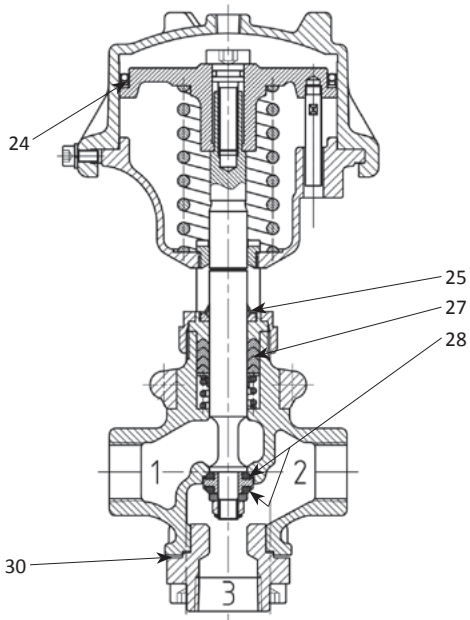
No.	Name	Valve	TPC-2313-15#*XY	TPC-2313-20#*XY	TPC-2313-25#*XY	TPC-231332#*XY	TPC-2313-40#*XY
1	Body		C-21215 - 01 #Y	C-21220 - 01 #Y	C-21225 - 01 #Y	C-21232 - 01 #Y	C-21240 - 01 #Y
2	Yoke		C-21115 - 02	C-21120 - 02	C-21125 - 02	C-21132 - 02	C-21140 - 02
3	Cylinder		C-21115 - 03 *	C-21120 - 03 *	C-21125 - 03 *	C-21132 - 03 *	C-21140 - 03 *
4	Stem		C-21115 - 04	C-21120 - 04	C-21125 - 04	C-21132 - 04	C-21140 - 04
5	Lower seat		C-31315 - 05 #XY	C-31320 - 05 #XY	C-31325 - 05 #XY	C-31332 - 05 #XY	C-31340 - 05 #XY
6	U-nut		C-21115 - 06	C-21120 - 06	C-21125 - 06	C-21132 - 06	C-21140 - 06
7	Guide washer		C-21115 - 07	C-21120 - 07	C-21125 - 07	C-21132 - 07	C-21140 - 07
8	Disc adapter		C-21115 - 08	C-21120 - 08	C-21125 - 08	C-21132 - 08	C-21140 - 08
9	Ring washer		C-21115 - 09	C-21120 - 09	C-21125 - 09	C-21132 - 09	C-21140 - 09
10	Gland		C-21115 - 10	C-21120 - 10	C-21125 - 10	C-21132 - 10	C-21140 - 10
11	Gland nut		C-21115 - 11	C-21120 - 11	C-21125 - 11	C-21132 - 11	C-21140 - 11
12	Guide bushing		C-21115 - 12	C-21120 - 12	C-21125 - 12	C-21132 - 12	C-21140 - 12
13	Piston		C-21115 - 13	C-21120 - 13	C-21125 - 13	C-21132 - 13	C-21140 - 13
15	Tension bolt		C-21115 - 15	C-21120 - 15	C-21125 - 15	C-21132 - 15	C-21140 - 15
16	Socket cap screw		C-21115 - 16	C-21120 - 16	C-21125 - 16	C-21132 - 16	C-21140 - 16
17	Socket cap screw		C-21115 - 17	C-21120 - 17	C-21125 - 17	C-21132 - 17	C-21140 - 17
18	Wing bolt		C-21115 - 18	C-21120 - 18	C-21125 - 18	C-21132 - 18	C-21140 - 18
19	Socket cap screw		C-21115 - 19	C-21120 - 19	C-21125 - 19	C-21132 - 19	C-21140 - 19
21	Packing spring		C-21115 - 21	C-21120 - 21	C-21125 - 21	C-21132 - 21	C-21140 - 21
22	Piston Spring		C-21115 - 22	C-21120 - 22	C-21125 - 22	C-21132 - 22	C-21140 - 22
23	O-ring		C-21115 - 23	C-21120 - 23	C-21125 - 23	C-21132 - 23	C-21140 - 23
24	Piston ring		C-21115 - 24	C-21120 - 24	C-21125 - 24	C-21132 - 24	C-21140 - 24
25	Dust seal		C-21115 - 25	C-21120 - 25	C-21125 - 25	C-21132 - 25	C-21140 - 25
27	Gland packing		C-21115 - 27	C-21120 - 27	C-21125 - 27	C-21132 - 27	C-21140 - 27
28	Disc ring (2x)		C-21115 - 28	C-21120 - 28	C-21125 - 28	C-21132 - 28	C-21140 - 28
30	Lower seat gasket		C-21115 - 30	C-21120 - 30	C-21125 - 30	C-21132 - 30	C-21140 - 30
55	Pin gauge		C-21115 - 55	C-21120 - 55	C-21125 - 55	C-21132 - 55	C-21140 - 55

please complete: A = ANSI flange, D = DIN flange, J = JIS flange / * please complete: N = NPT thread, B = BSPT thread, P = PT thread

Repair kit

DN	Model no.:
08, 10, 15	RK-21115
20	RK-21120
25	RK-21125
32	RK-21132
40	RK-21140

Content



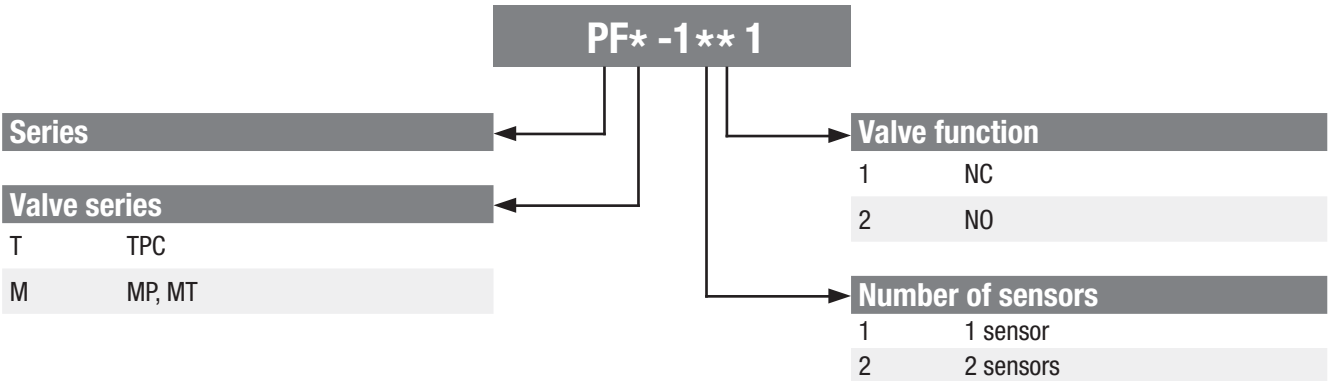
No.	Name	
25	Dust seal	
27	Gland packing	
28	Disc ring (2x)	
30	Lower seat gasket	
Recommended spare part		
24	Piston ring	

Electrical valve feedback sensor series PF

Valve position feedback for all types of ROCKY PISTON VALVES.
Sturdy and robust the cylinder contains contactless magnetic sensors and monitors the valve stem position.
Top and bottom guided for smooth trouble free operation. Easy to retro fit to existing valves.

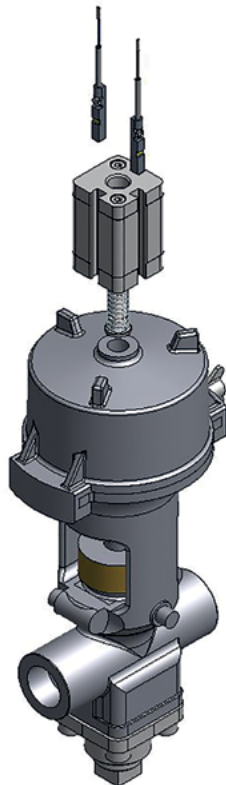


Order Code

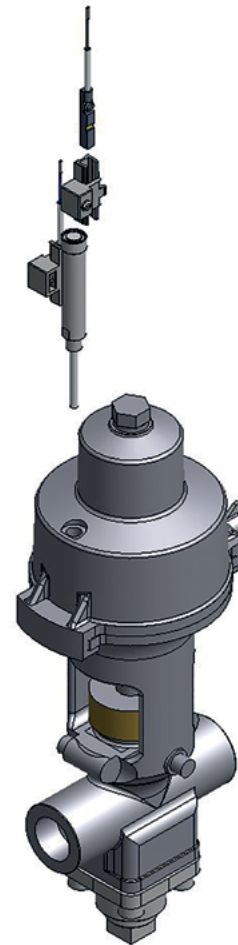


Installation

normally closed



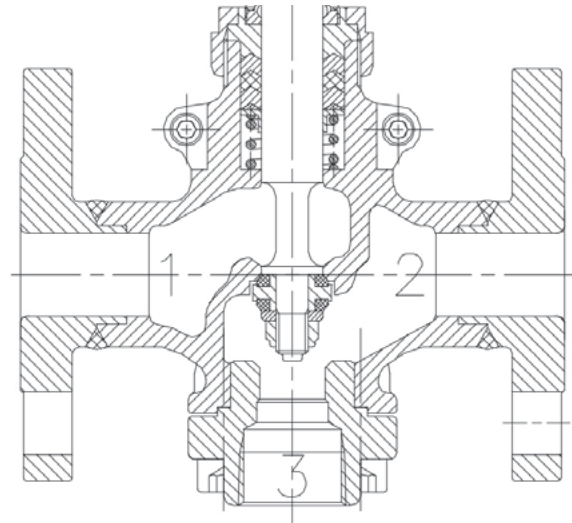
normally open



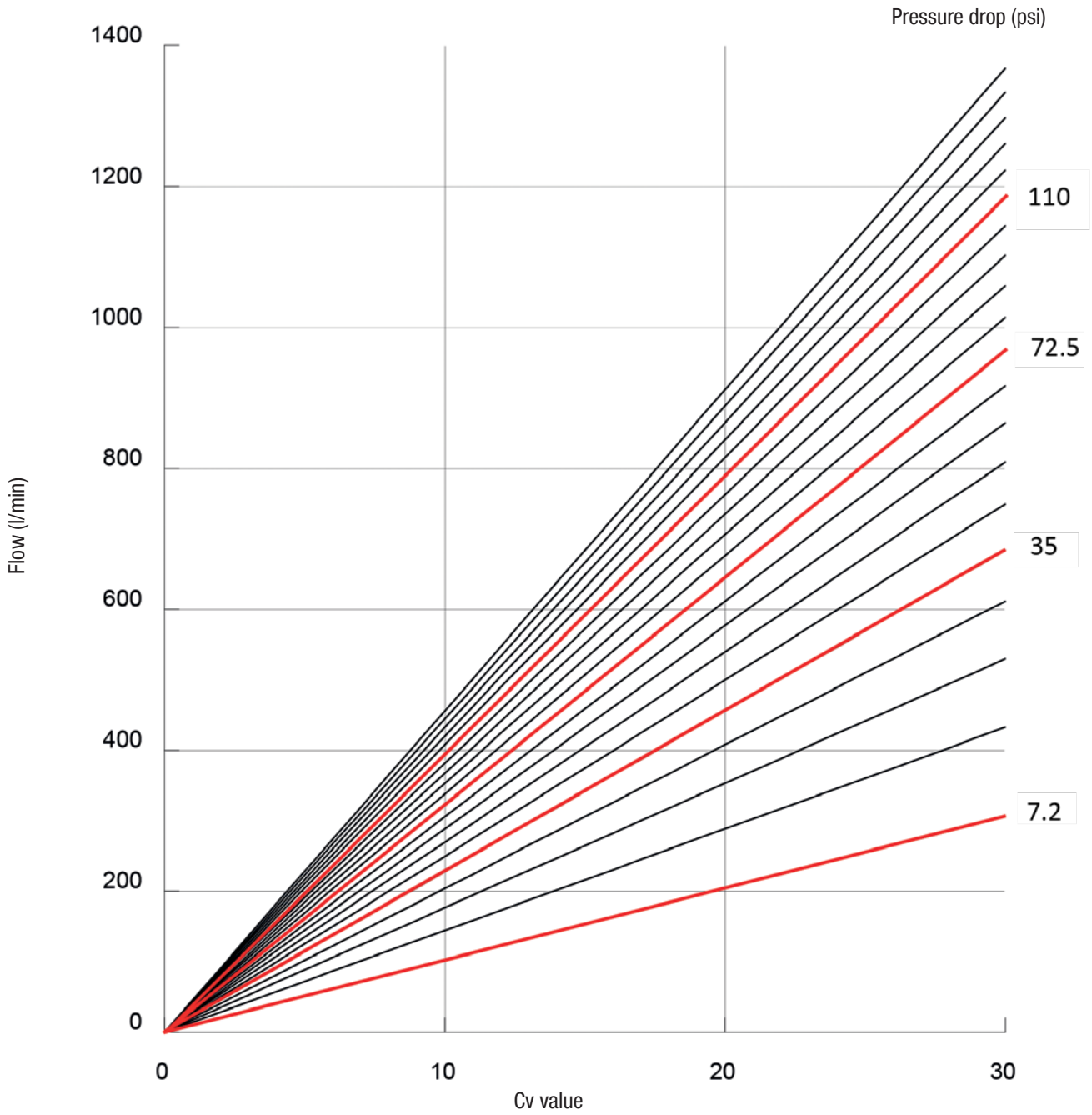
10

DN	Flow direction	Kv Value	Cv Value	Pressure drop (MPa)	Flow (l/min)
15	1⇒2	2.6	2.9	0.1	42
				0.2	59
				0.3	72
	2⇒1	2.6	2.9	0.1	42
				0.2	59
				0.3	72
	2⇒3	2.5	2.8	0.1	40
				0.2	57
				0.3	70
	3⇒2	2.15	2.4	0.1	35
				0.2	49
				0.3	60
20	1⇒2	4.8	5.4	0.1	78
				0.2	110
				0.3	135
	2⇒1	5.0	5.6	0.1	81
				0.2	114
				0.3	140
	2⇒3	5.4	6	0.1	86
				0.2	122
				0.3	150
	3⇒2	4.5	5	0.1	72
				0.2	102
				0.3	125
25	1⇒2	7.7	8.6	0.1	124
				0.2	175
				0.3	215
	2⇒1	8.0	8.9	0.1	128
				0.2	181
				0.3	222
	2⇒3	10.5	11.7	0.1	169
				0.2	238
				0.3	292
	3⇒2	9.6	10.7	0.1	154
				0.2	218
				0.3	267

DN	Flow direction	Kv Value	Cv Value	Pressure drop (MPa)	Flow (l/min)
32	1⇒2	11.8	13.2	0.1	190
				0.2	269
				0.3	330
	2⇒1	13.1	14.6	0.1	210
				0.2	298
				0.3	364
	2⇒3	14.1	15.8	0.1	228
				0.2	322
				0.3	394
3⇒2	16.4	18.3	0.1	264	
			0.2	373	
			0.3	457	
40	1⇒2	19.8	22.1	0.1	319
				0.2	450
				0.3	552
	2⇒1	19.1	21.4	0.1	308
				0.2	436
				0.3	534
	2⇒3	24.7	27.6	0.1	398
				0.2	563
				0.3	689
3⇒2	25.2	28.2	0.1	406	
			0.2	575	
			0.3	704	



Flow chart of Cv value / pressure drop



1