



JOUKA

PRODUCT GUIDE

BALL VALVES
ACTUATORS
ACCESSORIES

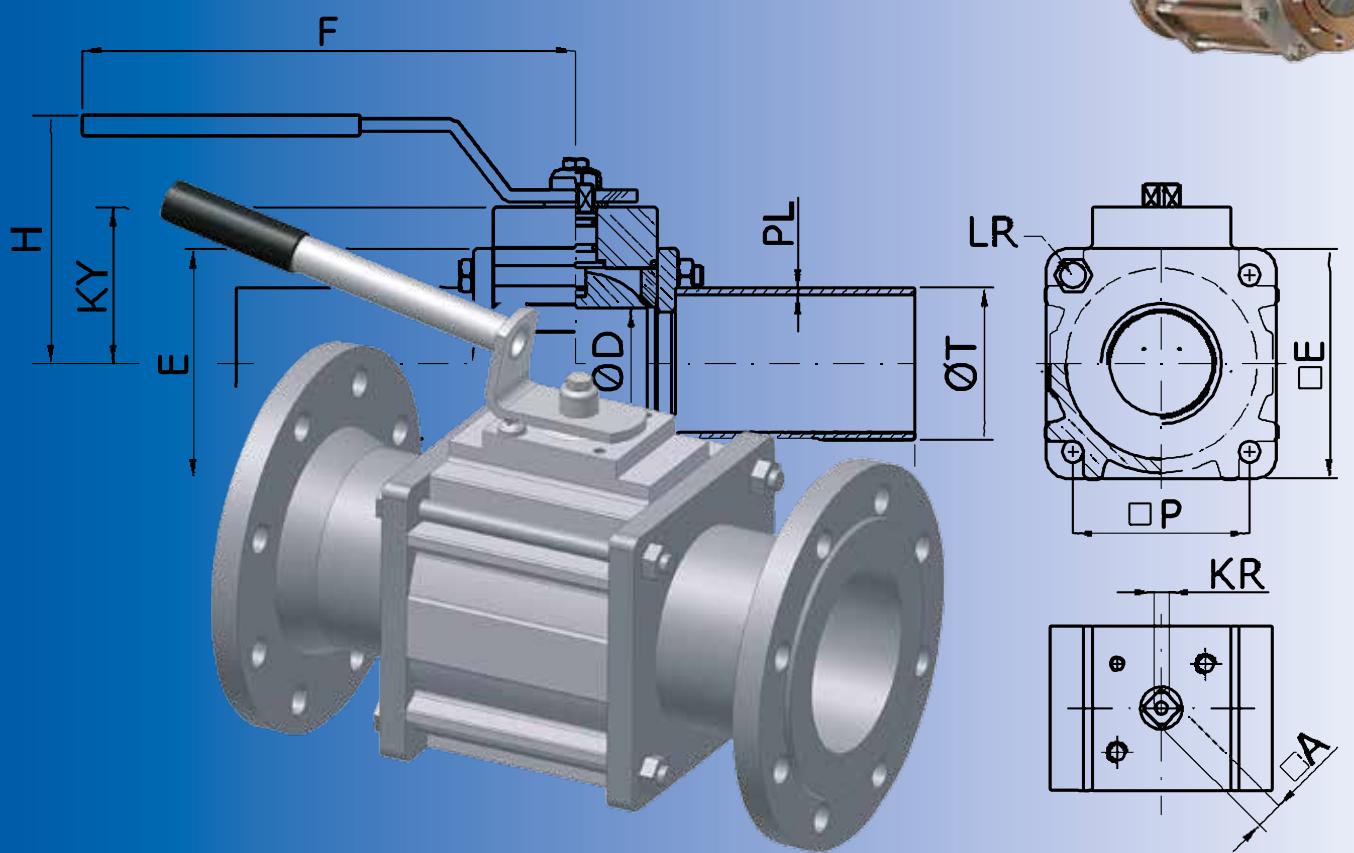


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JOUKA OY
1957-2013

ORGANISATION
CERTIFIED BY

Inspecta

ISO 9001
ISO 14001

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Somerotie 4, FIN-33470 YLÖJÄRVI, FINLAND
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DECISIVE BENEFITS

JOUKA is Your best choice:

Own design and manufacturing in an own factory in Ylöjärvi Finland since 1957.



Advantageous, long lifecycle

Spare parts directly from factory. All components available. Experienced and capable

Ball valve construction is developed according to customer feedback. That is why it is long lasting.

Variations

From manual operated to computer controlled.

Materials

Stainless steel, aluminium, steel. Also available Hastelloy, Duplex, SMO, titan, colour metals. Chromium coatings, hard- and anodized surfaces.

Special constructions

Jouka is manufacturing special models directly for customer need.

Large range of different models

Valves can be equipped with different kind of regulation-, control-, locking-, connection- and operation equipments.

Design support

We will assist You in designing the valve for right purpose. You can also utilize our 3D and 2D drawings.

According to EU-Directives

The bar code is tracing materials and manufacturing.

There is no need to regret the buying of a good product!

The critical factors when selecting a valve

Many valves can work when they are tested, but after longer time usage the maintenance costs can easily multiply the original price of the valve. Jouka could have been following the functioning of its own products for almost 50 years time period. Even if you can get a complete spare part set from us, the sale of spare parts is only 0,2 % from our turnover. That tells that Jouka ball valve is made to be reliable.

There are even at the 1970's installed Jouka valves still fully operating in various functions and positions. For example the ball sealings in Jouka valves are notable wide so that elapsing margin would be enough for many years. Many times there are contaminants flowing with the fluids in the piping system and even different kind of fibrous materials that cause erosion. Jouka valve is protected better against erosion. Also the bigger size of the ball gives better close-up surface between the ball hole and the sealings. Because we don't use casts in the framework, there aren't any problems caused by non-homogenous porous material.

Left in the photo there are parts of Jouka ball valve. Both valves are sold as a same size despite their measurement and quality differences. Every Jouka valve has as a standard equipment an engine support that can be used with any actuator in the market.



DECISIVE BENEFITS

Characteristic for all Jouka ball valves:

Body components are not castings, material is homogenous, the media cannot get absorbed to the body material.

Easy to install: end pieces can be flanged, plain, with weld joints, R-thread or hose joints.

Easy to service and repair: valve can be removed from the pipe line without removing the flanges.

Reliable and trouble-free function in all positions and small flow losses.

Can also be equipped with pneumatic, hydraulic or electric actuator.

Positioner and limit switch versions.

Ball sealings of material PTFE or specials: carbonfiber, graphite, PTFE/AISI 316. Metal sealings, stellite-, colour metal- and filler sealings.

Balls can be shell or massive type, hard chromium coated or aluminium, steel, stainless, TiNi -coated or other special materials.



ALUMINIUM VALVES

PN 16 / 25

DN 20-100

Temperature class -30 °C / +130°C, pH 4.5 - 8.5

Applications:

Air and gas lines, lubricants, fuels and oils, coolants, active water lines, sewages, flushing lines, powders, granulates, fire extinguish lines, tank vehicles, fire vehicles, sewage trucks. Can be equipped with stainless steel or hard chromium coated balls. Standard aluminium ball always anodized. Flanges can be of stainless steel material, too.

Benefits:

- Economical solution
- Light weight, smaller vibrations on pipe lines
- Modular construction
- No castings in body
- Anti corrosive



Special light

Ball valve with aluminium body is best known in the Jouka product family.

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STEEL VALVES

PN 16 / 25, Available PN 64/80

DN 10-200

**Temperature class; -30°C - +180°C,
with special and metal sealings +230°C**



Applications:

Gas lines, hot and cold water and all oils.

Benefits:

- Stainless ball and shaft construction
- Available with hard chromed ball
- Modular construction
- Special construction available



STAINLESS STEEL VALVES

PN 16 / 25, available PN 64/80

DN 10-200

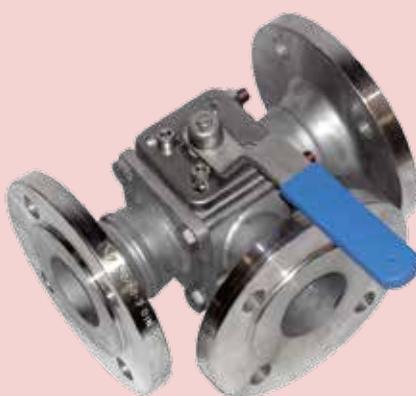
**Temperature class; -30°C - +180°C,
with special and metal sealings +230°C**

Applications:

All areas with corrosive mediums or corrosive environment. Process- and chemical industry, paper industry, machine and vehicle builders.

Benefits:

- Good chemical resistance
- Easy construction for variations
- Also Fire Safe (ISO 10 497) available
- Atex -models (hazardous surroundings)
- Special constructions available



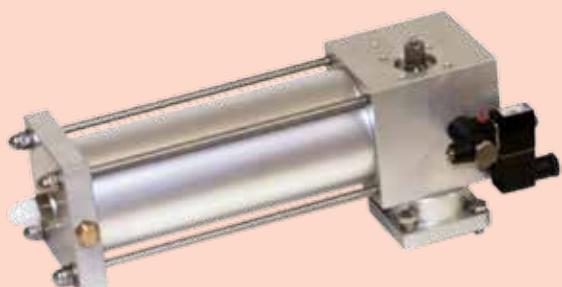
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PROCESS INDUSTRY

Jouka is the expert in process industry applications

- Robust hydraulic Joline actuator.



- Filler sealing to prevent blocking up of medium in valve housing.



- Special sealing material
. PTFE+AISI 316 alloy.



- Higher pressure class valve.



PROCESS INDUSTRY



Acid-resistant metal, PTFE gaskets of ball and PTFE O-rings.



Acid-resistant metal for process chemical.



3-way valve with bottom outlet.
Handle turns 180 degrees.



Ball and sealings for 3-way valve.



Jouka extruder-valve.



Ball valve made of steel material
Duplex for special conditions.

PAPER INDUSTRY



3-way ball valve for de-inking in recycle pulp process.



Stainless sample taking valve with metallic sealings (stellite).



Full-hole DN200, ball and metallic gaskets with hard chrome plating. For high temperatures and abrasive medium.



Special valve for paper machine



Valves and actuators for analyzer.

CHEMICAL INDUSTRY



Stainless ball valve with double acting pneumatic actuator, controlled by digital positioner. Continually adjusted computer control keeps the flow and/or pressure in constant value.



Safety valve with automatic spring return - prevents forgetting the valve into open position.



Jouka elastomer valves for special applications.



Single-acting actuator ensures safety in case of malfunction.



Duplex valve for sampling.

MACHINERY AND HYDRAULICS



Hose connectors available in numerous sizes and forms.



Aluminium valve with hose connection and adjustable handle for different positions.



Flush valve: weight of assembly was halved with compact and more economical customer - solution.



Special valve for the cold conditions of Siberia.



TiNi coated ball and titanium ball.



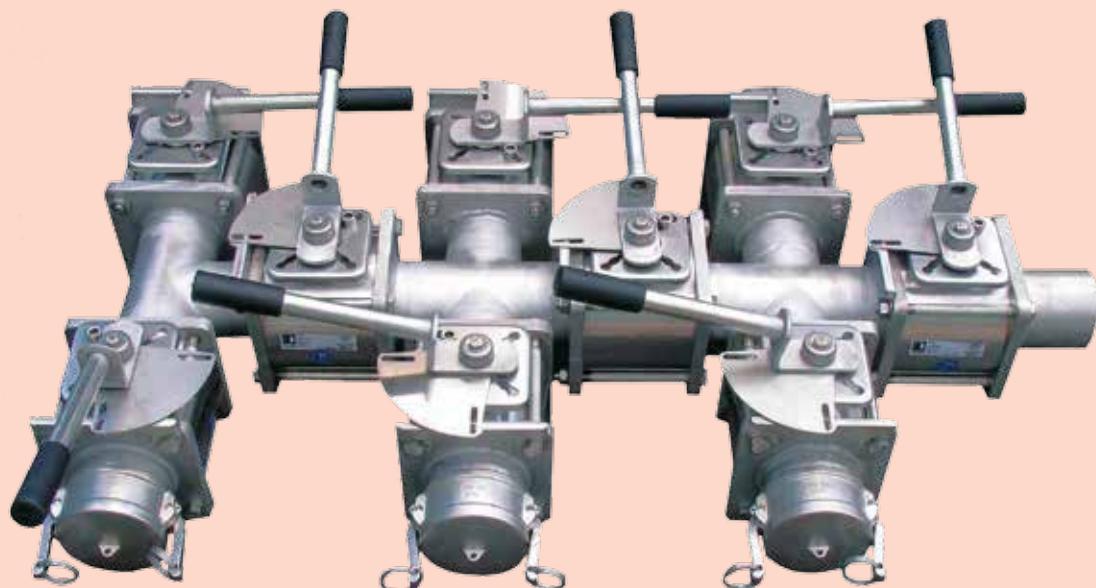
Aluminium valve with sector-ball,
specially for pneumatic powder and
flour transportation systems and -
vehicles.



Stainless valve with actuator
flange according to ISO 5211
standard.



“Kamlok” coupling.



Manifold for acid media transport.

TORQUES FOR SOFT GASKETS

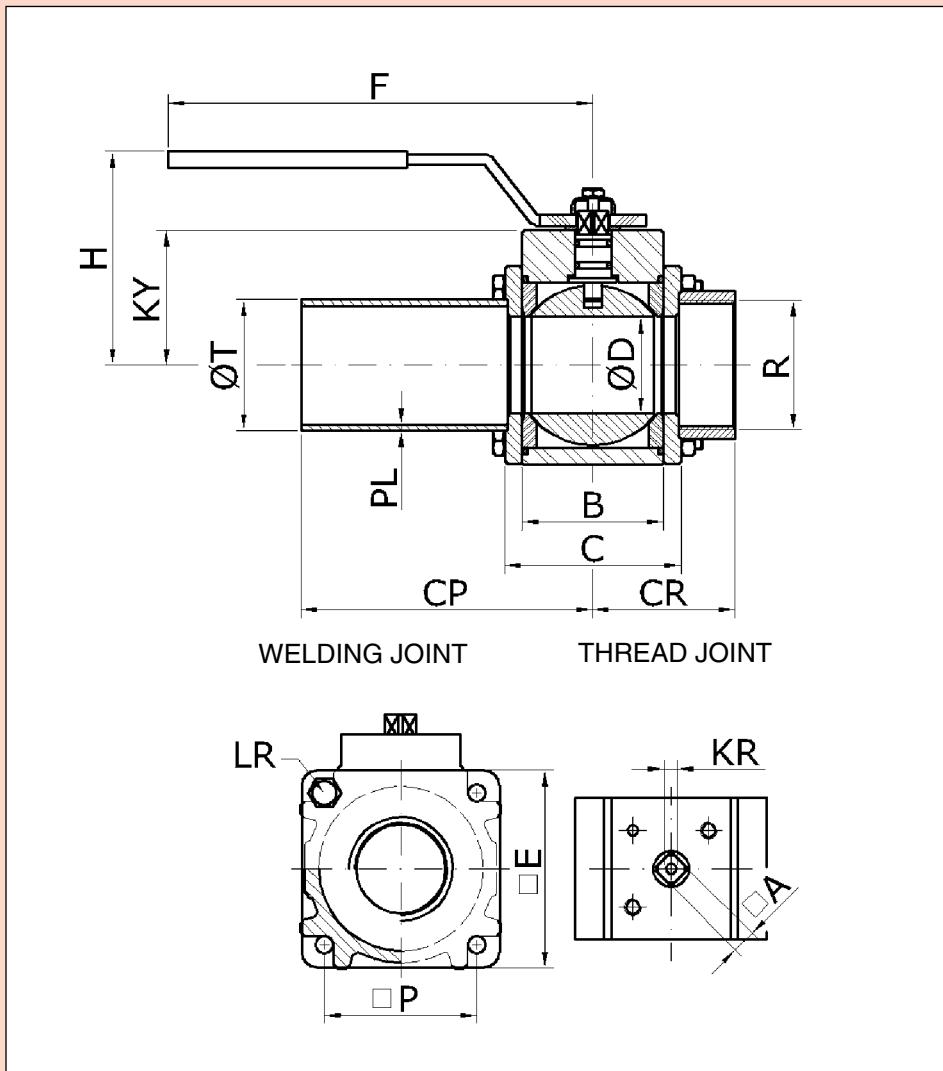
Ball valves ball tightening torque

DN	Torque PTFE gasket Pressure bar.					Torque for stellite gasket Pressure bar.				
	0-8	9-17	18-25	26-33	34-40	0-8	9-17	18-25	26-33	34-40
10-15	10	12		14	15					
20-25	16	19	21	23	24	20	23	25	27	30
32	23	25	27	29	30	30	34	36	38	40
40-50	45	50	55	57	60	55	60	64	67	70
65	60	68	75			65	70	75		
80/67	72	85	95			80	95	100		
80/80	80	100	112			90	120	140		
100/90	95	130	150			105	150	180		
100/100	110	160	210			135	185	220		
125	150	280	380			180	310	400		
150	280	550	750			350	700	850		
200	450	850	1200			600	1200	1300		
250	1120	2200	3000							
300	2400	4500	6300							

Ball valves ball tightening torques

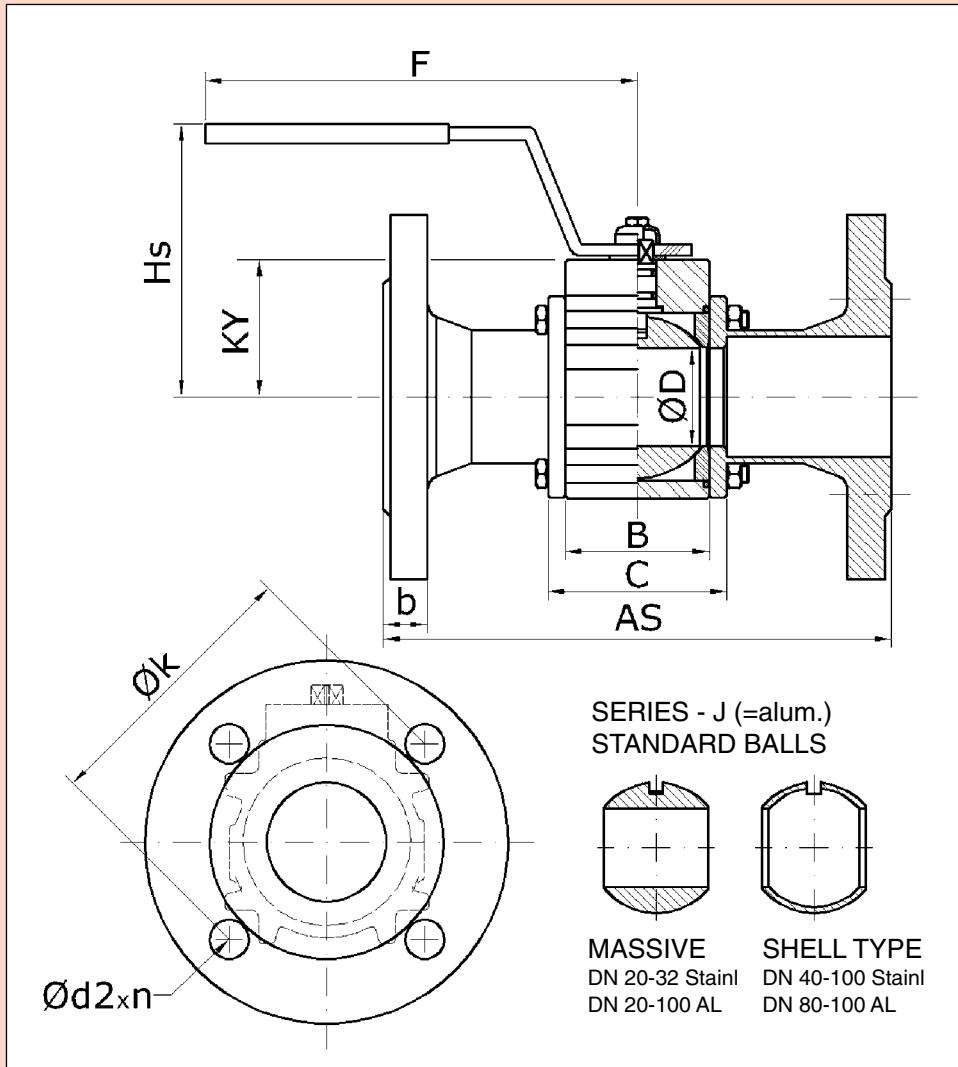
Boltsize	Tightening torque
M6	12Nm
M8	30Nm
M10	60Nm
M12	90Nm
M16	210Nm
M20	315Nm

ALUMINIUM VALVES



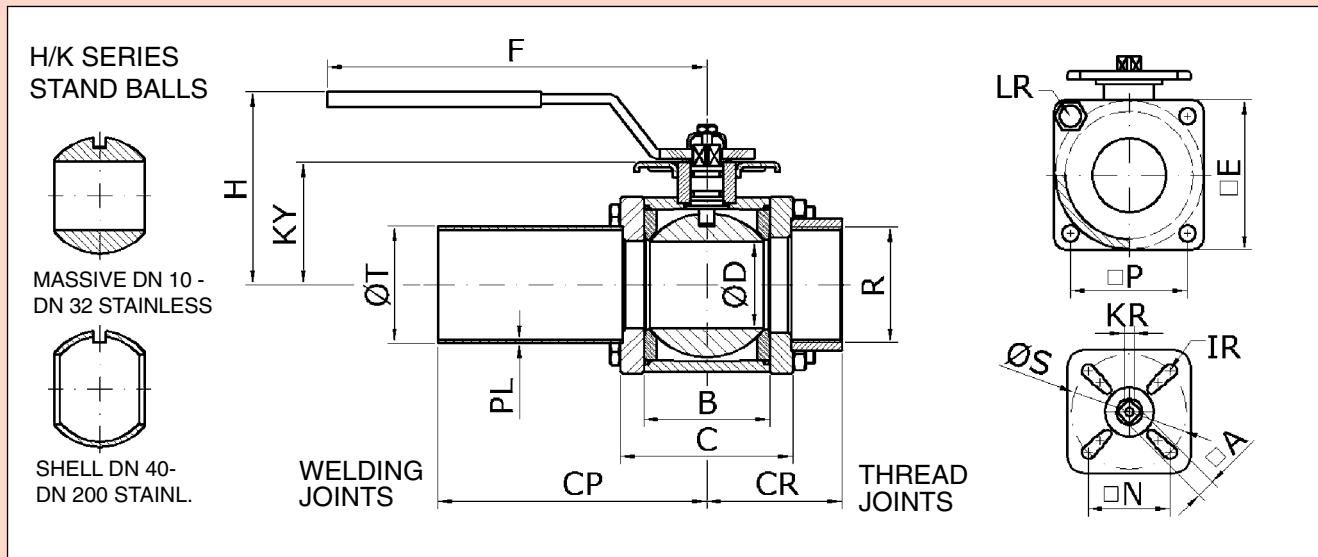
TYP	NOMIN. SIZE DN		D	PN	A	B	H	E	F	R	KY	P	KR	LR
	mm	in												
J020	20	3/4	25	25	11	36	60	61	150	3/4"	40	46	M6	M8
J025	25	1	25	25	11	36	60	61	150	1"	40	46	M6	M8
J032	32	1 1/4	32	25	11	50	90	74	200	1 1/4"	53	57	M6	M8
J040	40	1 1/2	50	25	11	65	100	91	200	1 1/2"	62	70	M6	M8
J050	50	2	50	25	11	65	100	91	200	2"	62	70	M6	M8
J065	65	2 1/2	55	16	14/17	77	160	112	260	2 1/2"	74	86	M8	M10
J080	80	3	65	16	14/17	90	165	124	260	3"	81	97	M8	M10
J100	100	4	90	16	14/17	126	190	167	260	4"	106	129	M8	M12

ALUMINIUM VALVES



C*	CP*	T	PL*	CR*	DIN 2633 PN16								NIM. KOKO DN		
					AS	d2	n	k	b	Hs	PKY	mm	in		
52	121	26,9	2,3	43	150	14	4	75	18	75	1	20	3/4		
52	121	33,7	2,6	46	160	14	4	85	18	75	1	25	1		
66	128	42,4	2,6	56	180	18	4	100	18	110	1,5	32	1 1/4		
81	136	48,3	2,6	67	200	18	4	110	18	100	2,4	40	1 1/2		
81	136	60,3	2,9	69	230	18	4	125	20	100	2,6	50	2		
101	146	76,1	2,9	81	290	18	4	145	18	125	4,3	65	2 1/2		
114	152	88,9	3,2	94	310	18	8	160	20	135	5,8	80	3		
150	170	114,3	3,2	117	350	18	8	180	20	130	10,8	100	4		

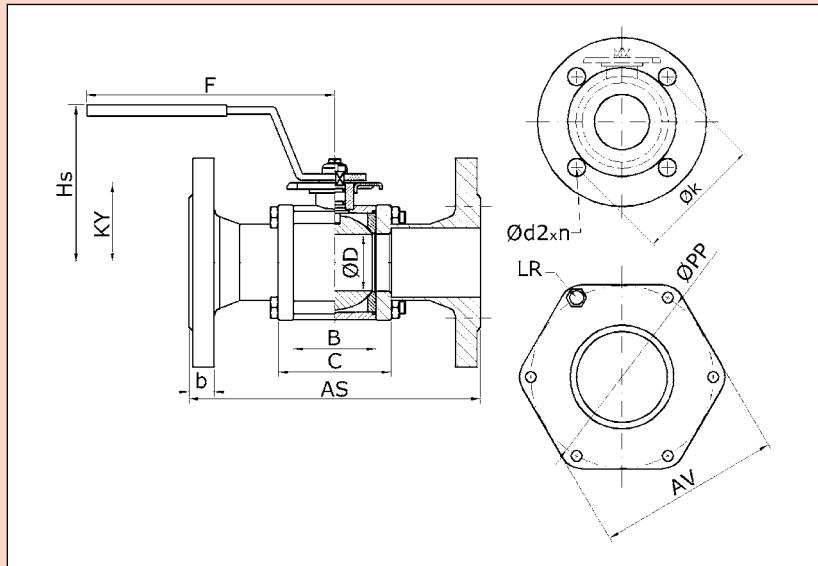
*The measures are directive. The measures of the table are to steel pipe fittings.



NOMIN. SIZE DN mm	in	ISO										C*					
		D	PN	5211 F	A	B	H	E	F	R	KY		LR	PP	AV		
10	3/8	15	25	F05	11	30	50	47	150	3/8"	31	32	M6	M6	-	-	42
15	1/2	15	25	F05	11	30	50	47	150	1/2"	31	32	M6	M6	-	-	42
20	3/4	25	25	F05	11	36	60	61	150	3/4"	39	46	M6	M8	-	-	51
25	1	25	25	F05	11	36	60	61	150	1"	39	46	M6	M8	-	-	52
32	1 1/4	32	25	F05,F07	11	50	90	74	200	1 1/4"	54	57	M6	M8	-	-	66
40	1 1/2	48,5	25	F05,F07	11	65	100	91	200	1 1/2"	63	71	M6	M10	-	-	85
50	2	48,5	25	F05,F07	11	65	100	91	200	2"	63	71	M6	M10	-	-	85
65	2 1/2	48,5	16	F05,F07	11	65	100	91	200	2 1/2"	63	71	M6	M10	-	-	85
65	2 1/2	55	16	F07,10	17	77	165	112	260	2 1/2"	73	86	M8	M10	-	-	101
65	2 1/2	67	16	F07,10	17	90	170	124	260	2 1/2"	81	97	M8	M10	-	-	114
80	3	67	16	F07,10	17	90	170	124	260	3"	81	97	M8	M10	-	-	114
80	3	80	16	F07,10	17	116	185	152	260	3"	94	115	M8	M12	-	-	140
100	4	80	16	F07,10	17	116	185	152	260	4"	94	115	M8	M12	-	-	140
100	4	90	16	10,12,14	22	126	205	167	310	4"	103	129	M8	M12	-	-	158
100	4	100	16	10,12,14	22	136	220	202	310	4"	111	-	M8	M12	200	202	168
125	5	100	16	10,12,14	22	136	220	202	310	-	111	-	M8	M12	200	202	168
125	5	125	16	10,12,14	22	164	240	235	310	-	132	-	M8	M16	220	235	204
150	6	125	16	10,12,14	22	164	240	235	310	-	132	-	M8	M16	220	235	204
150	6	150	16	10,12,14	27	186	315	272	*	-	167	-	M8	M20	272	275	226
200	8	150	16	10,12,14	27	186	315	272	*	-	167	-	M8	M20	272	275	226
200	8	200	16	10,12,14	27	242	351	366	*	-	206	-	M8	M20	351	366	282
250	10	250	10	12,14,16	36	303	*	466	*	-	270	-	M8	M24	442	466	359
300	12	300	10	12,14,16	36	356	*	542	*	*	308	*	M8	M24	515	542	415

*with handwheel

ND STAINLESS



ISO 5211	IR	N	S
F05	M6	35,4	50
F07	M8	49,5	70
F10	M10	72,1	102
F12	M12	88,4	125
F14	M16	99	140

R = Thread joints
 P = Long welding joints
 T = Short weld. joints
 D = DIN flanges
 I = Without flanges

If short welding joints; the total length of valve according to agreement.

CP*	T	CR*	PL		DIN						WEIGHTS (Kg)					NOMIN. SIZE DN	
			H	K	AS	d2	n	k	b	Hs	R	P	T	D	I	mm	in
115	17,2	45	1,6	2	130	14	4	60	16	70	0,6	0,7	0,6	2,0	0,4	10	3/8
115	21,3	35	1,6	2	130	14	4	65	16	70	0,7	0,7	0,6	2,2	0,4	15	1/2
120	26,9	42	1,6	2,3	150	14	4	75	18	80	1,4	1,5	1,4	3,6	0,7	20	3/4
120	33,7	45	1,6	2,6	160	14	4	85	18	80	1,4	1,6	1,4	4,0	0,7	25	1
127	42,4	54	1,6	2,6	180	18	4	100	18	115	2,4	2,6	1,9	5,5	1,0	32	1 1/4
137	48,3	64	1,6	2,6	200	18	4	110	18	125	3,5	4,0	3,6	8,3	2,0	40	1 1/2
137	60,3	68	1,6	2,9	230	18	4	125	20	125	3,5	4,1	3,7	9,4	2,0	50	2
137	76,1	72	1,6	2,9	290	18	4	145	18	125	3,7	4,2	3,7	11,2	2,0	65	2 1/2
145	76,1	80	1,6	2,9	290	18	4	145	18	165	6,3	7,0	6,4	13,6	3,7	65	2 1/2
151	76,1	86	1,6	2,9	290	18	4	145	18	170	8,6	9,6	8,9	16,4	5,1	65	2 1/2
151	88,9	89	2	3,2	310	18	8	160	20	170	8,6	9,6	8,9	18,5	5,1	80	3
164	88,9	102	2	3,2	310	18	8	160	20	185	14,3	15,1	14,7	22,5	10,3	80	3
164	114,3	102	2	3,6	350	18	8	180	20	185	14,3	15,1	14,8	24,6	10,3	100	4
173	114,3	111	2	3,6	350	18	8	180	20	205	20,0	19,8	19,0	29,3	12,5	100	4
177	114,3	116	2	3,6	350	18	8	180	20	220	23,5	23,3	22,5	32,8	15,4	100	4
177	139,7	-	2	4	400	18	8	210	22	220	-	23,3	22,5	36,5	15,4	125	5
196	139,7	-	2	4	400	18	8	210	22	240	-	-	37,8	51,8	25,7	125	5
196	168,3	-	2	4,5	480	22	8	240	22	240	-	-	37,8	53,7	25,7	150	6
207	168,3	-	2	4,5	480	22	8	240	22	315	-	-	64,8	80,7	44,3	150	6
207	219,1	-	2	6,3	457	22	12	295	24	315	-	-	65,3	87,2	44,3	200	8
236	219,1	-	2	6,3	457	22	12	295	24	315	-	-	-	115	48,0	200	8
380	273	-	2,6	6,3	895	22	12	350	26	-	-	-	-	225	115,0	250	10
408	323,9	*	3,2	7,1	950	22	12	400	26	*	*	*	*	318	172,0	300	12

TYPE SELECTION

Nominal size of valve DN xx

Flow port diameter, not marked in aluminium valve type codes

O- ring material:

V = Viton rubber = FPM
T = PTFE ("teflon")
E = EPDM-rubber
N = nitrile rubber = NBR

H080/065HVP-__-__-__...

Ball composition:

A = Aluminium
H = Stainless
K = Hard chromium coated

Body material:

J = Aluminium
H = Stainless steel
K = Steel

Joints:

R = inside thread = R (BSP)
P = welding joint, long, standard
T = welding joint, short
F = plain, flat flange (special use)
S = light metal, loose, with DIN drilling,
max. PN10 bar
D = flanged, D1= PN16,
D2= PN25, D4= PN40
O = without flanges, just with body, ball,
shaft, seals with screws/nuts
C = male "kamlok-hose joint"
L = hose joint
N = NPT –inside thread

If the joints differ from each other, marking is e.g. ...HVP/L-... = St-ball, viton o-ring, long welding joint / hose joint (handle mounted to point towards hose joint in open position)

Additional markings:

V = manual handle, e-galvanized
VH = manual handle stainless steel
T = the size of the square
end of shaft, e.g T14 = 14 mm
PP = ball with cylindric bore
C = ball sealings PTFE + C (25% carbon)
NS = pipe standard, based on pipe
inside measures
PN = pressure class, e.g PN 40 = 40 bar
E = special solution, explained
separately case by case
CR = hard chromium coated ball

MAINTENANCE



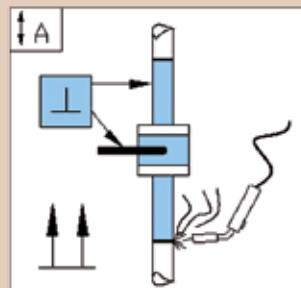
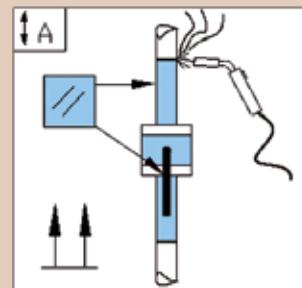
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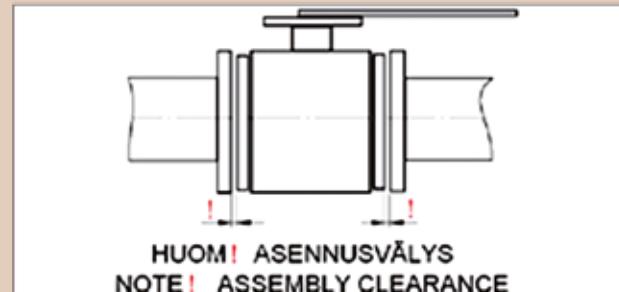
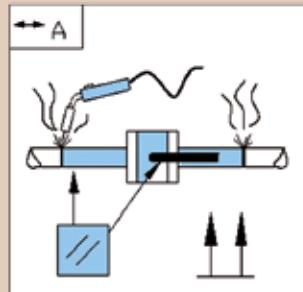
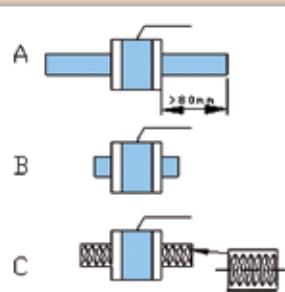
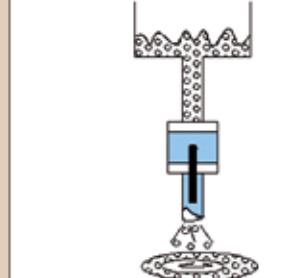
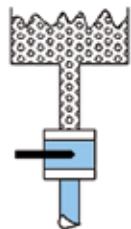
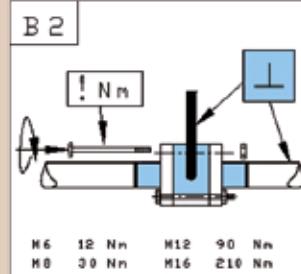
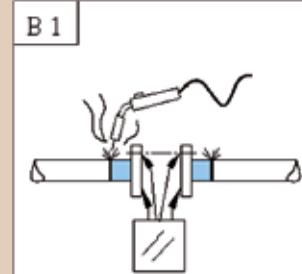
Palloventtiili * Ball valve

Asennus- ja käyttöohjeet * Monteringsanvisningar
 * Mounting instructions * Monteringsanvisning *
 Instructions de montage * Montagehinweise

Ver. 2



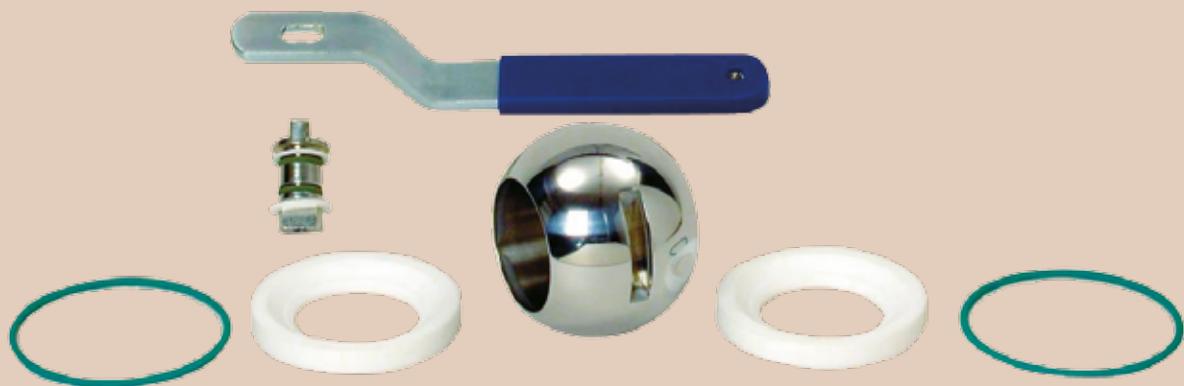
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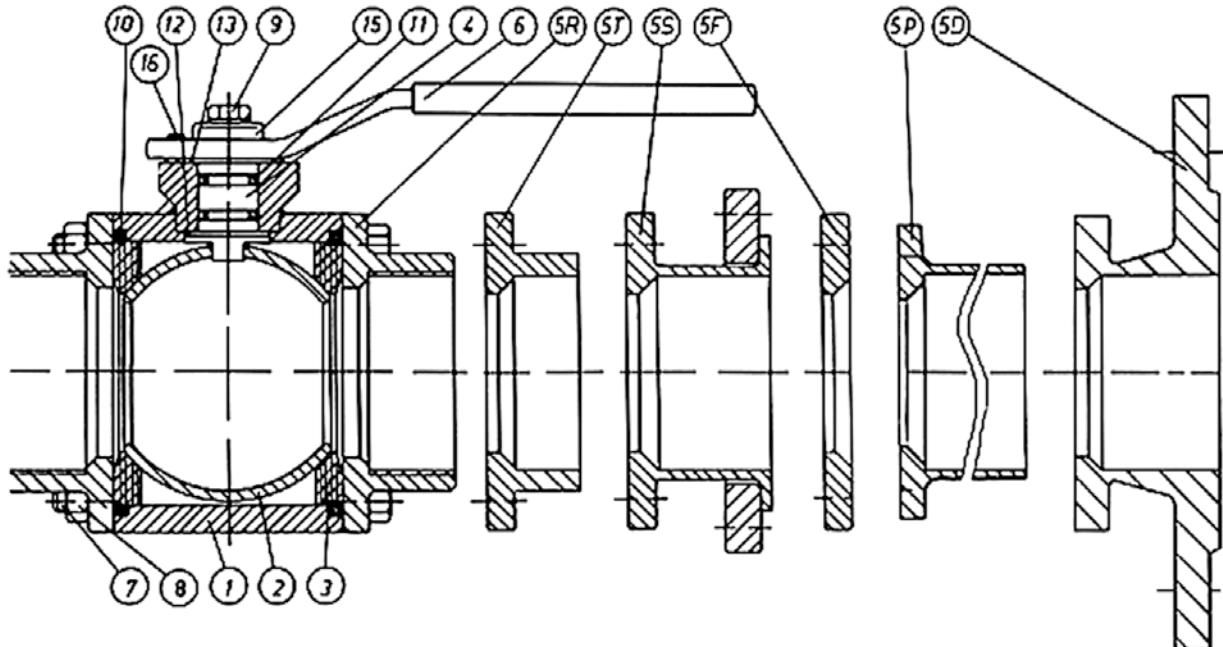
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MAINTENANCE



Spare parts even for 40 years old Jouka valves.

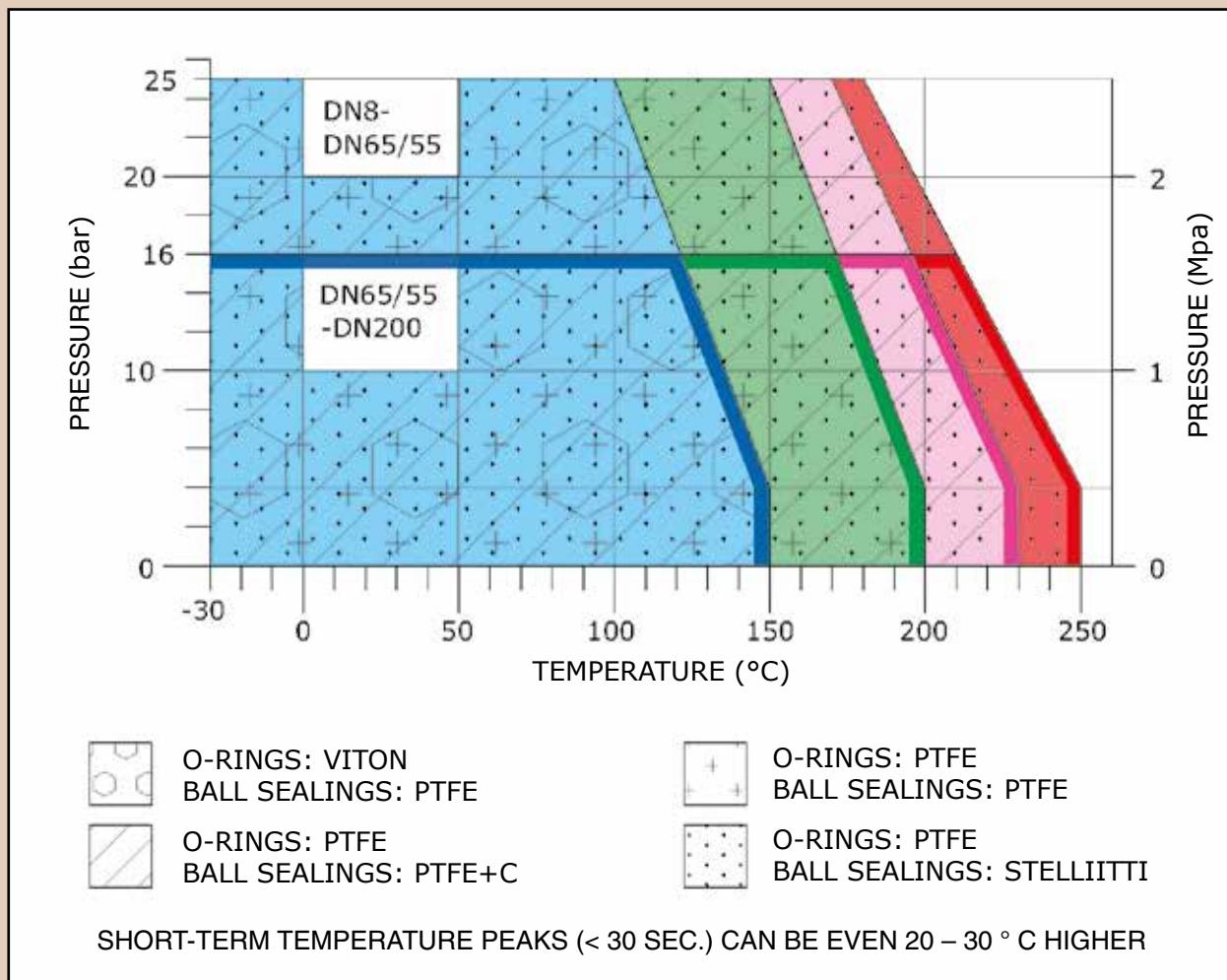


SPARE PARTS CATALOGUE J, H AND K-SERIES

Part no	Quantity	Name	Materials	Part no	Quantity	Name	Materials	
			Type H	Type K			Type H and K	
1	1	Body	AISI 316	St 52	7	4 (6)	Hexagon screw	St. galvanized or AISI 316
2	1	Ball	AISI 316	AISI 316	8	4 (6)	Hexagon nut	St. galvanized or AISI 316
3	2	Ball seal *)	PTFE/PTFE+C	PTFE/PTFE+C	9	1	Hexagon screw	St. galvanized or AISI 316
4	1	Shaft	AISI 316	AISI 316	10	2	O-ring *)	NBR, EPDM, Viton or PTFE
5 R	2	R-thread union	AISI 316	St 37 **)	11	2	O-ring *)	Viton, PTFE, NBR or EPDM
5 T	2	Short weld. union	AISI 316	St 35.8 **)	12	1	Bearing *)	PTFE
5 S	2	Loose flage PN 10	AISI 316	St 37 **)	13	1	Washer *)	PTFE
5 F	2	Smooth extra precision finished union	AISI 316	St 37 **)	15	1	Washer	Fe, galvanized or AISI 316
5 D	2	Solid flange PN25 or PN 16	AISI 316	St 37 **)	16	1	Limiting pin	St 52 or AISI 316
5 P	2	Long Weld. union	AISI 316	St 35.8 **)				
6	1	Handle	St, galvanized or AISI 316	St, galvanized **)				
*) Also AISI 316				*) Seal kit (complete)				

MAINTENANCE

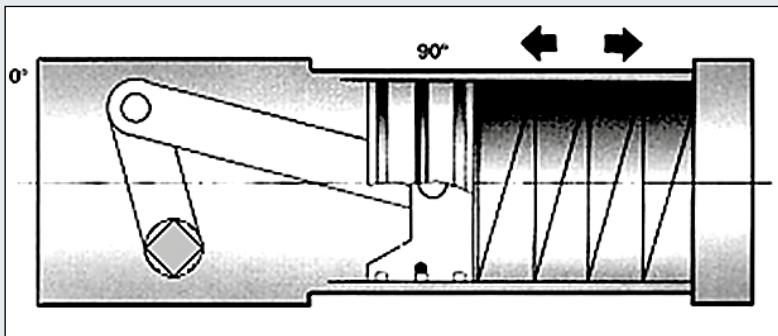
JOUKA pressure /temperature correlation for steel and stainless steel ball valves, with different ball sealing types.



Joline

Construction and function

Actuator construction is simple and reliable changing the straight motion into rotational motion. That is why Joline actuator has less wearing parts. Large bearing surfaces are securing long life cycle. Actuator functions are exact and clearance-free.



Technical data:

Max operating pressure: 1 MPa (10 bar)

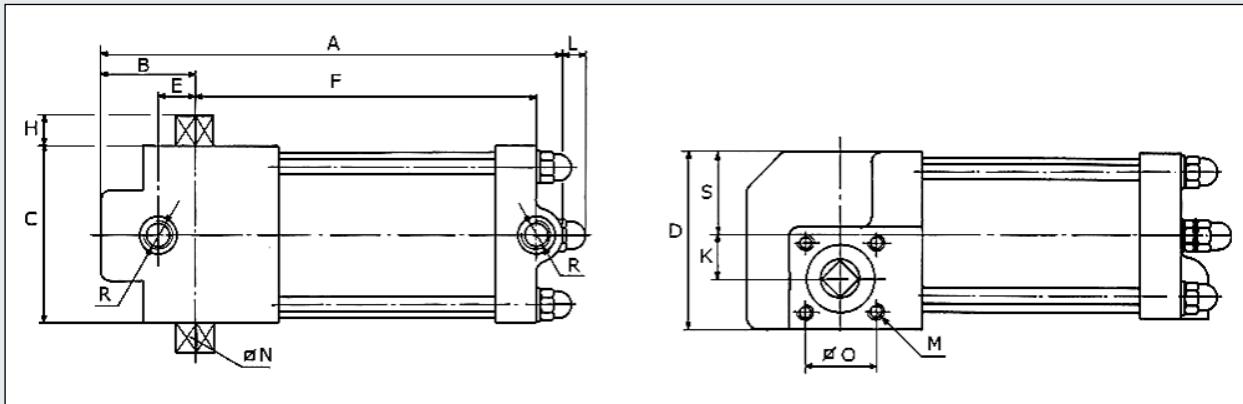
Operating media: Air, neutral gas

Spring return: Coil springs

Lubrication: Not necessary. Bearings are low friction type.



ACTUATORS



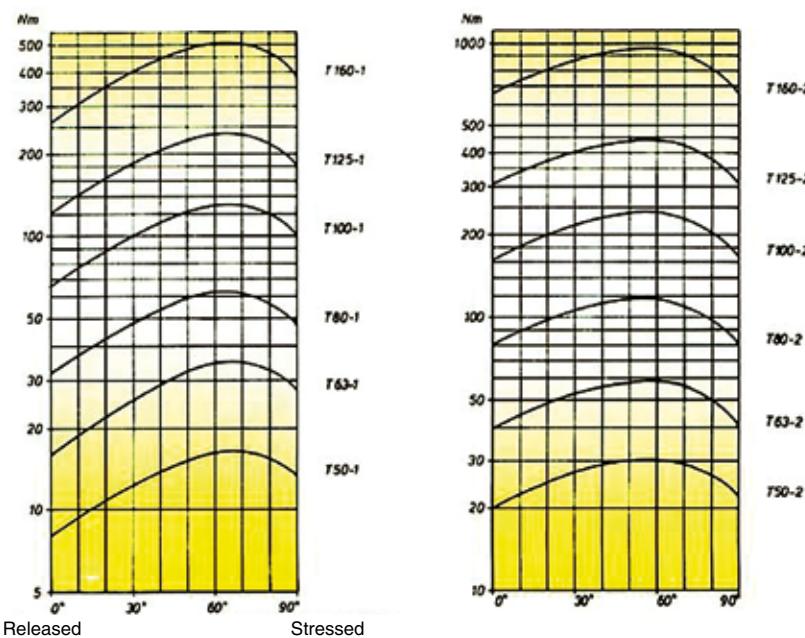
SPRING RETURN

Type	Nm/ 5bar	A	B	C	D	E	F	H	K	N	R	M	S	Weight/ kg	ltr/ stroke	
T-50-1	8	252	34	60	65	20	215	10	15	25	9,5	1/4"	M6	31	1,6	0,15
T-63-1	15	293	41	75	75	16	245	10	18	25	9,5	1/4"	M6	37,5	3	0,26
T-80-1	30	345	50	95	95	20	271	12	22	35	12	1/4"	M6	47	5	0,55
T-100-1	55	435	65	114	114	26	350	14	30	35	14,3	1/4"	M8	57	6,2	1
T-125-1	120	520	76	140	147	30	392	22	37	65	22	1/4"	M10	68	18	1,6
T-160-1	260	750	107	178	191	40	612	24	50	80	30	3/8"	M12	87	35	3,6

DOUBLE ACTION

T-50-2	20	170	34	60	35	20	120	10	15	25	9,5	1/4"	M6	31	0,9	0,21
T-63-2	35	184	41	75	75	16	133	10	18	25	9,5	1/4"	M6	37,5	1,6	0,44
T-80-2	75	228	50	95	95	20	186	12	22	35	12	1/4"	M6	47	2,9	0,91
T-100-2	150	280	65	114	114	26	204	14	30	35	14,3	1/4"	M8	57	5	1,8
T-125-2	300	375	76	140	147	30	245	22	37	65	22	1/4"	M10	68	11	3,1
T-160-1	650	480	107	178	191	40	312	24	50	80	30	3/8"	M12	87	20	7,13

Torque curves of JOLINE actuators



ACTUATORS

ALL JOUKA BALL VALVES CAN ALSO BE QUIPPED WITH OPTIONAL ACTUATOR MODELS AND LIMIT SWITCHES

Pneumatic, hydraulic or electric actuators are available with different kind of optional limit switches and positioners.



JOUKA AP



Several alternatives of limit switches



Atex valves

For hazardous surroundings.
Prevents static discharge in construction.

ATEX-94/9/EC: EX II 3 GD, 2/22.

CERTIFICATES



ISO 14001:2004



ISO 9001:2008



PED module A1



Rostech nazor



GOST R



JOUKA

PRODUCT GUIDE

**JOUKA
also offers subcontracting:**

METAL PRESSINGS, DEEP DRAWINGS, MACHINE PARTS

From 160 tons pressing to finest finishing. With our numerous hydraulic and mechanic presses and over 60 production machines we carry out many kinds of machining, CNC-machining, welding, assembly and polishing jobs.

Tailor made products

We help You to find a right solution from design and tools to final product.

Favourable tools manufacturing

The materials for the good product are efficient tool designing, manufacturing, tool service and possible rebuilding. Deep drawing belongs to our special skills.

Flexible production

Annual manufacturing amounts per item are typically something between some thousands to tens of thousands.

