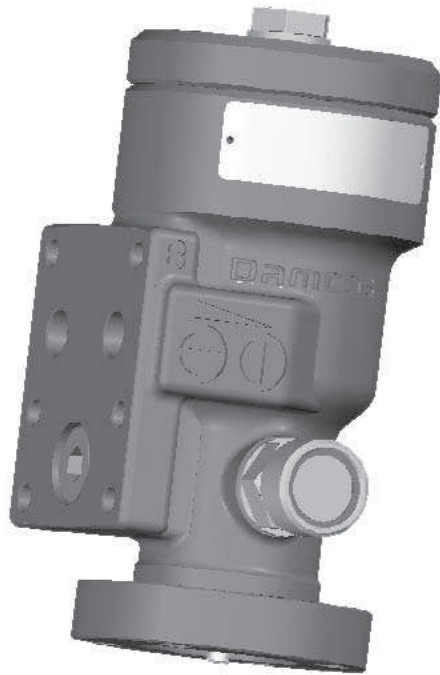


Damcos™ KC

Hydraulic linear double-acting actuator



KC Hydraulic Linear Double-Acting Actuator

The KC converts hydraulic energy into linear motion with thrust proportional to the applied pressure. The KC has no external moving parts during operation and has a built-in device for maintaining pressure at temperature variations. The KC is designed with built-in crossover valve and is equipped with a direct visual position indicator.

The KC can be operated in any kind of environment and can easily be adapted to all well-known globe valves, and all models are prepared for direct built-on modular control functions.

Technical Data

Working pressure	135 bar
Test pressure	1,5 x working pressure
Burst test	min. 675 bar
Closing thrust at 135 bar	220 000 N
Viscosity of hydraulic oil	15 to 200 cSt

Main Specification

Temperature range	-20°C to +80°C (other temperature ranges on request)
Housing	GGG40
Piston	GGG40
Output spindle	Brass, other material on request
Indicator housing	Brass MS 58
Intermediate flange	St 52-3, other material on request
Coating	Primer: Min 40 µm, type Hempel EE 13140 Top coat: min 25 µm alkyd, red no. 51320

Standard Optionals

The KC actuator for intermediate positions and fail set operation of globe valves:

- Unique and simple design with built-in crossover valve
- Easy installation on intermediate flange at globe valve
- Same unit for several valve sizes
- Will operate in sea air as well as sea water
- No external moving parts during operation
- Prepared for direct built-on modular control functions or LPU
- Direct visual position indication
- Built-in device for maintaining pressure at temperature variations
- Hydraulic on/off position indication
- Electrical on/off or continuous position indication
- IP 68
- Connection block with e.g. filter
- Pilot operated non-return valve
- Release valve
- Throttle valve
- Quick connection for emergency operation with portable hand pump
- LPU mounting
- Epoxy coating
- On request spec. features as:
 - Flushing valve built into the connection block
 - Making it possible to flush the system without disconnection of pipes.

Main Specifications

Type	Closing thrust at 135 bar N	Max Stroke* mm	Total dry weight kg	Oil displacement at full stroke, litres	Dimensions bottom view, mm.						Dimensions front view, mm.								
					ØA	ØB	C	D	E	F	G	H	ØI	J	K	L	M	ØO	ØP
KC 65	17000	16.25	4.5	0.021	62	9	80	48	-	-	35	36	76	17	15	-	157	80	-
KC 125	35000	31.25	7.0	0.082	75	9	76	50	52	72	42.5	42	90	17	20	189	202	98	-
KC 250	92500	62.50	24.0	0.428	118	14	70	78	77	72	72.5	72	140	23	35	-	343	150	-
KC 325	127000	81.25	54	0.793	165	21	70	103.5	-	-	96	-	205	-	42	428	468	175	-
KC 400	220000	104	87	1,7	165	21	70	103,5	-	-	115	105	205	30	42	467	520	226	-

* pre-stressed 3 mm

Manufacture

The KC actuators are manufactured in accordance with the guidelines for quality system stated in the American standard ANSI/ASQC Z-1.15.

After assembly each actuator is flushed to NAS 1638/10 standard and plugged.

Flushing to NAS 1648/7 standard can be performed on request.

Operation Restrictions

Please observe specific rules and demands from classification societies and authorities concerning operation pressure and temperature range.

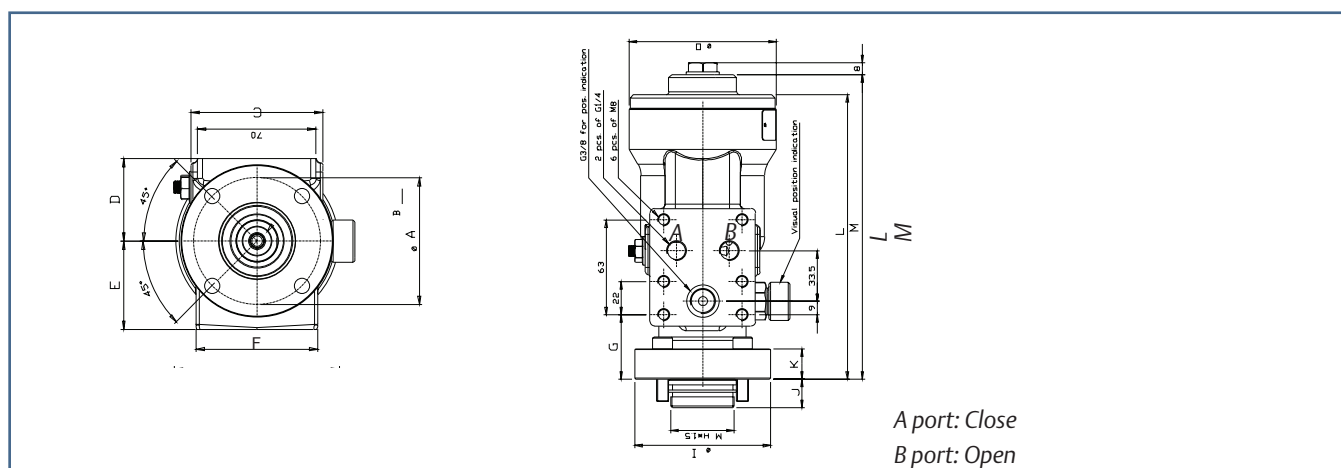
(Example - ABS: Max. operating pressure = 20% of burst pressure.)

Control Equipment

The actuators are designed for pipe connection to the G 1/4 actuator port or actuator mounted control equipment.

For further information please see separate data sheets for the whole range of blocks and other actuator mounted control equipment.

Main Dimensions



Classification

Meets the requirements from the major classification and approval authorities like:

- Det Norske Veritas
- Lloyd's Register of Shipping
- American Bureau of Shipping
- Rina
- Russian register of Shipping
- Bureau Veritas
- Germanischer Lloyd
- U.S. Coast Guard

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