

# Switch units (press control valves) type CR

The switch units type CR, available in three sizes, are intended for the control of bottom and top ram presses, which are driven by dual stage pumps. They consist of a 2/2-way ball seated directional valve, a ball type check valve and pressure valves.

Low pressure and high pressure circuit are joined during rapid transverse, as soon as the set pressure is achieved or exceeded the low pressure circuit is switched in idle circulation mode, whereas the high pressure circuit continues feeding the press cylinder.

An automatic pre-release ensures decompression without pressure surges. These switch units are designed for direct mounting onto our hydraulic power packs type MP and RZ.



Nomenclature:	Valve combination consisting of: <ul style="list-style-type: none"><li>• 2/2-directional seated valve</li><li>• Ball type check valve</li><li>• Pressure valve</li></ul>		
Design:	Individual valve for pipe connection		
Actuation:	Solenoid Manual		
$p_{max}$ :	LP	30 ... 60 bar	HP 400 bar
$Q_{max}$ :	LP	80 ... 160 lpm	HP 8 ... 20 lpm A → R 160 ... 300 lpm

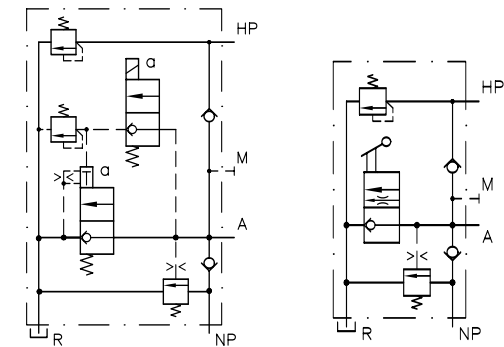
## Basic types and general parameters

Basic type and size	Flow $Q_{max}$ (lpm)			Oper. pressure $p_{max}$ (bar)			Tapped ports (BSPP)			Application
	HP	LP	A → R	HP	LP	A and R	HP	NP	M	
CR 4M	8	80	200	400	30 ... 60	G 1	G 1/4	G 3/4	G 1/4	Bottom ram press, of self-returning due to its weight (min. load pressure > 2 bar)
CR 4H	8	80	200	400	30 ... 60	G 1	G 1/4	G 3/4	G 1/4	
CR 5M	20	160	300	400	30 ... 60	G 1 1/4	G 3/8	G 1	G 1/4	

## Symbols

CR 4M and CR 5M

CR 4H



Solenoid voltage

- 24V DC; 230V AC 50/60 Hz
- Other voltage on request
- Plug with LED, improving EMC,  
(see also also section “Additional information”)

Order examples

CR 4M - G24

Switch unit CR, size 4, solenoid actuated  
solenoid voltage 24V DC

Additional versions

- Press control valve for bottom ram press with differential circuit  
(type CR44M), retracting with high pressure stage only, cylinder area  
ratio  $A_1 : A_3 \geq 8 : 1$

CR 4H

Switch unit size 4, manually actuated

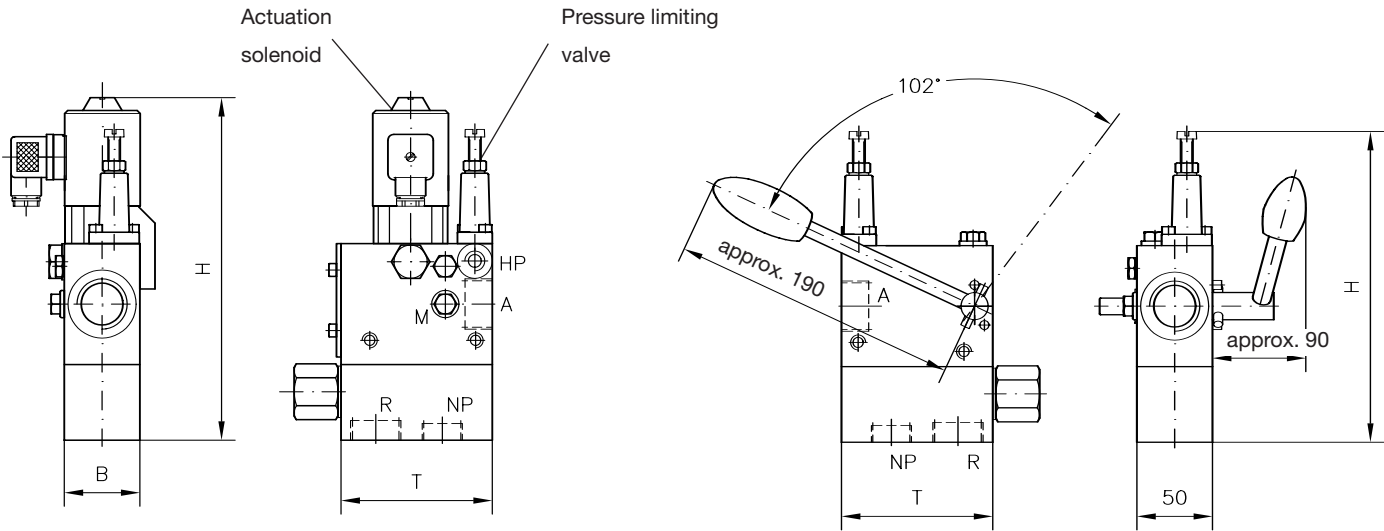
Dimensions

Type CR 4M

(see order example)

Type CR 4H

(see order example)



Basic type	H	B	T	m (kg)
CR 4M	max. 247.5	50	100	5.2
CR 4H	max. 202	50	100	4.7
CR 5M	max. 277.5	63	135	10.0

All dimensions in mm, subject to change without notice!

Additional information

- Switch units type CR D 7150
- Two-stage valves type NE D 7161
- Plug with LED etc. D 7163
- Hydraulic power packs type RZ D 6920, D 6920 H
- Hydraulic power packs  
type MP, MPN, MPNW, MPW D 7200, D 7200 H, D 7207
- See also section “Devices for special applications”  
(Press controls, Devices for up to 700 bar)

For page and section of the devices additionally listed,  
see type index