0190 / 0191

Diaphragm / piston pressure switches up to 24 V with gold contacts

- Zinc-plated steel (CrVI-free), with spade terminal
- Changeover with gold contacts
- Overpressure safety up to 100/300/600 bar[1)]
- Hysteresis adjustable at factory





p_{max} in bar	Adjustment range in bar	Tolerance at room temperature in bar	Male thread	Order number
0190 Diaphragm pressure switches with spade terminal				
100[1)]	0.3 - 1.5	± 0.2	G1/4	0190 - 457 03 - X - 003
			M10x1 con.	0190 - 457 01 - X - 001
			M12x1.5 cyl.	0190 - 457 02 - X - 002
			NPT1/8	0190 - 457 04 - X - 318
			NPT1/4	0190 - 457 09 - X - 314
			7/16-20 UNF	0190 - 457 20 - X - 301
			9/16-18 UNF	0190 - 457 21 - X - 302
300[1)]	1 - 10	± 0.5	G1/4	0190 - 458 03 - X - 042
			M10x1 con.	0190 - 458 01 - X - 040
			M12x1.5 cyl.	0190 - 458 02 - X - 041
			NPT1/8	0190 - 458 04 - X - 343
			NPT1/4	0190 - 458 09 - X - 340
			7/16-20 UNF	0190 - 458 20 - X - 341
			9/16-18 UNF	0190 - 458 21 - X - 342
	10 - 50	± 3.0	G1/4	0190 - 459 03 - X - 009
			M10x1 con.	0190 - 459 01 - X - 007
			M12x1.5 cyl.	0190 - 459 02 - X - 008
			NPT1/8	0190 - 459 04 - X - 320
			NPT1/4	0190 - 459 09 - X - 316
			7/16-20 UNF	0190 - 459 20 - X - 305
			9/16-18 UNF	0190 - 459 21 - X - 306
	10 - 100	± 3.0 - 5.0	G1/4	0190 - 461 03 - X - 012
			M10x1 con.	0190 - 461 01 - X - 010
			M12x1.5 cyl.	0190 - 461 02 - X - 011
			NPT1/8	0190 - 461 04 - X - 321
			NPT1/4	0190 - 461 09 - X - 317
			7/16-20 UNF	0190 - 461 20 - X - 307
			9/16-18 UNF	0190 - 461 21 - X - 308
0191 Piston pressure switches with spade terminal				
600[1)]	50 - 200	± 5.0	G1/4	0191 - 460 03 - X - 003
			M10x1 con.	0191 - 460 01 - X - 001
			M12x1.5 cyl.	0191 - 460 02 - X - 002
			NPT1/8	0191 - 460 04 - X - 304
			NPT1/4	0191 - 460 09 - X - 303
			7/16-20 UNF	0191 - 460 20 - X - 301
			9/16-18 UNF	0191 - 460 21 - X - 302

Seal material – Application areas

NBR	Hydraulic/machine oil, heating oil, air, nitrogen, etc.	1
EPDM	Brake fluid, water, hydrogen, oxygen, acetylene, etc.	2
FKM	Hydraulic fluids (HFA, HFB, HFD), petrol/gasoline, etc.	3
FFKM	Chemical acids, diluted alkalis, ketones, ester's, alcohols	6
HNBR[2)]	Hydraulic/machine oil, ester-based bio-oils	9

Refer to page 53 for the temperature range and application thresholds of sealing materials.

Your order number:	019X – XXX XX – X – XXX

[1)] Static value. Dynamic value is 30-50 % lower. Values pertain to the hydraulic/pneumatic part of the pressure switch.
[2)] HNBR diaphragm not available for pressure ranges between 0.3 - 0.5 bar.